CHRISTOPHER GREY'S

LIGHTING TECHNIQUES
FOR BEAUTY AND GLAMOUR PHOTOGRAPHY

A Guide for Digital Photographers

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ABOUT THE AUTHOR

Christopher Grey, an acknowledged world-class photographer and Master of Light, describes himself as husband, dad, photographer, author, educator, lover of bad science fiction movies, jazz fan, average golfer, poor dancer, voracious reader, unfulfilled comedian, and occasional village idiot. All are true.

PHOTO COURTESY OF JOEY TICHENOR.

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KUDOS

Well, by gosh, by golly (as we French Russian Danes like to say), here's another one from Ol' Brown Eyes.

I had so much fun with this book. I have to tell you that it really stretched me as an artist and photographer, forcing me to flesh out new ways to work with lights and lighting. I hope you play and learn from each and every one of the new techniques I've laid out, as I did when I thought them up. We, an industry of photographers dedicated to creating memories above the norm, must continually evolve to meet the rising expectations of our clients. Visual mediocrity, perhaps even corporate death, awaits us if we do not, and we simply cannot let that happen to the business we love and cherish, our creative calling.

My models and makeup artists, along with others who helped me on this voyage, deserve recognition and, as always, I'll list each of the talented contributors who freely gave of their time to help me with this project. You should also know that there are a number of models who were photographed at the outset of this project but whose images did not make the cut because their shoots were tests, an error on my part, or because I found easier or less expensive ways to accomplish my goals. Though they remain anonymous to you, they have my profound thanks for their efforts.

This was a huge project, and there are lots of people to thank. First, the models who put up with my mumbling to myself as I thought a shot through: Courtney Agar, Tanya Anderson, Denise Armstead, Tristy Auger, Gianna Alvarez-Avelli, Sandra Avelli, Katy Becker, Lola Bel Aire, Michelle Blonigan, Melissa Buche, Victoria Bugayev, D. Carmen, Angela Christianson, Veronica Clark, Laurel Danielson, Jillian Devona, Kelsey Eliason, Laura Erchul, Cassie Glover, Tammy Goldsworthy, Liz Grey, Anthony Hennigan, Victoria Holliday, Laura Hughes, Courtney Johns, Andrea Jones, Brooke Keys, Kangla Khang, Katie Krall, Erin Kromer, Christa Lillehei, Erin Magnuson, Kari Maiorino, Michelle Malinski, Erin Nauman, Kathryn Nelson, Katie Netherton, Julie Nielsen, Tammi Rose, Sahata, Faith Samson, Margot Scheltens, Rachel Schutz, Margaret Sinarath, Marlee Southam, Evangeline Stacy, Aleta Steevens, Cassie Streich, Kay Tuveson, Anne Ulku, Alexandra Vang, Liliane Vangay, Sarah Whiting, Kaesha Williams, Ily Yang, Linda Yang, Pa Nou Yang, and Ying Yang. To all of you, my deepest thanks and appreciation for your time and your talent.

As always, the makeup artists are the unsung heroes of the studio (I wrote a chapter on the topic in *Christopher Grey's Advanced Lighting Techniques*). Without their help, you'd be looking at 120+ pages of beautiful women with shiny faces. Special thanks to: Sandra Avelli, Nicole Fae, Sarah Morrison, Jennifer Holiday Quinn, Nahla Sonbol, and Derkie Thor. You are, in one word, fantastic.

To my buddy Joey Tichenor, thanks for another great author photo. Joey tells his clients that I've taught him everything he knows. Doubtful. I may have taught him how to make things work, but his vision is entirely his own. Joey does terrific work, with a personal twist that's interesting and very entertaining, and you can check it out at www.jtichenorphotography.com. For this, Joey, you owe me lunch.

To Sue, my beautiful wife, thanks once again for not just putting up with my sometimes ridiculous schedule but actually encouraging it. I don't think I'm done yet, so please don't lose that attitude. And to Liz, our beautiful daughter. You two wonderful people inspire me more than you know.

INTRODUCTION

The female of our species has been the subject of artistic expression since the first artist scratched a stick figure on a cave wall. Artists have gotten better since then, thankfully, and with the advent of photography, the range of artistic expression grew exponentially. Even so, the objective behind our fascination with women is exactly the same as it was for that first nameless artist: to create a work of art that represents our subject in a beautiful and attractive way that will transcend time.

I gauge the success of my portrait photography on the number of people who jump up and down or shed a tear or two when they look at a final print. Under that criterion, I've been very successful because I've predicated that success on a number of factors—some personal and some technical—and I'll do my best to explain them to you over the course of this book. Both will take practice on your part, as well as a commitment to challenge yourself to produce progressively better work.

Nudity is frequently a factor in beauty and glamour photography. Even though I've enjoyed the challenge of photographing the nude since I began my career, I've avoided including such images in this book because I want to reach the largest audience possible, and some venues would not carry this book if certain body parts were represented. Rest assured that any of my lighting techniques will work as well on an unclothed figure. It's up to you as a photographer and visionary to form your concepts and decide how they would be best represented.

As with every aspect of photography, there are many subcategories that tag along. For beauty and glamour, one might call some work "*Maxim* style," after the popular and titillating men's magazine. "Boudoir" photography typically describes a sexy image made for a client's significant other, while "goth glamour" and "fetish glamour" explore possible darker sides. We'll take a look at some of these styles, and how they differ from each other, to give you an idea of what's out there or to help you find your direction.

I heard a story, many years ago, from an internationally recognized photographer and friend who had photographed a woman—tastefully, artistically, and in the nude. The images were of sufficient quality to be included in a book of his images. Unfortunately, the woman died in a tragic car accident shortly after the book was published. The woman's mother confronted the photographer and sought to take out some of her anger over her daughter's death on him. The photographer, who had not previously heard of the death, was distraught (as you can imagine), but he spoke to the mother about the freedom, the joy, and the cathartic experience his model had as she was being photographed as she had requested—uninhibited and in a safe environment. "All I could say," he said, "is that the photographs would keep her young forever."

The mother eventually came to treasure the images for what they were, but the story illustrates the responsibility we have, as photographers, to be true to our calling and to represent our clients in a professional manner, with every creative tool at our disposal.

1. THE GEAR AND THE LOOK

Throughout this book, I'll show you examples of many different types of light and light modifiers. Umbrellas, softboxes, reflectors, and even sheets of white board, any and all can be used to create stunning images of beautiful women. The key is how they are used, alone or together, with similar or dissimilar modifiers.

You may find a technique (I hope you find many) that you really like but are reluctant to try because you don't have the same style or size modifier that I used. Don't be. The principles are the same although the look may be slightly different. If you follow the diagrams I've included but modify them as necessary for your gear, you'll still get stunning images.

When seeking to purchase any modifier, consider the size of the product versus the size of your studio. If you were to buy a 4x6-foot softbox, would you have room to use it to its full advantage or would it extend too far into your shooting space? Do you have the space and the height to accommodate 4x8-foot bookends, or would you be better off cutting them down a bit? Would collapsible reflectors be better?

You will be working with your gear for years. Think it through, and buy only what you need.

SOFTBOXES

Softboxes (**image 1.1**) are the mainstay of my studio, and I use them more than any other modifier. Certain styles of softbox work better for some applications than others, but they can be considered, essentially, interchangeable, as long as you understand their properties and limitations.

IMAGE 1.1.

Large. My large softboxes are 4x6 feet and take up quite a bit of real estate in the studio. Still, they produce great light. When placed close to the model, the light is soft with open shadows. Because it's so large, you can move it quite far from the model before you see evidence of the contrast and specularity you'd see with a smaller source.

On average, the distance from the main light to the model is 6 feet for a head-and-shoulders portrait. For purposes of comparison, all the following samples will show the main light and modifier at that distance, and without any additional fill. You'll be able to see the differences between the effects created by the various modifiers quite easily. Please bear in mind, though, that shadows and specularity will increase when the light is moved farther away and will decrease when the distance is diminished. Here, I've placed my model closer than usual to the background—about 3 feet away—so you can see what the shadow looks like. See **image 1.2**.

Medium. Medium softboxes (mine are 3x4 feet) are the most valuable modifiers in my arsenal. I use them for everything from portraits to product, and I rely upon them more often than any other modifier. They are extremely valuable for location portraiture as well, whether it's a glamour shoot or business portrait, indoors or out. See **image 1.3**.

Small. Small softboxes are available in many sizes, from the extra-small 15x18-inch version to 2x3-foot unit. I think you'll find these most useful for background or hair lights, or to add underfill highlights, but they do make effective main lights. You can see from my sample that, at 6 feet, contrast and specularity are more evident with the 2x3-foot unit than with the previously described sizes. However, should you move a

IMAGE 1.2.

IMAGE 1.3.

IMAGE 1.4.

IMAGE 1.5.

box like this in quite a bit closer to the subject, you'll find that the main light it throws is very dramatic: soft, with open shadows, but with rapid falloff. See **image 1.4**.

Strip Lights. Strip lights (long, narrow softboxes engineered to produce an even output of light across their length) are a somewhat specialized accessory. I have several 1x6-foot strip lights that I use frequently as accents, sidelights, background lights, or hair lights. They are not cheap and require a special speed ring that not all strobe manufacturers make, but they produce a light that's both beautiful and hard to define. Profoto (my brand of choice) is one of the few making a 1x6-foot box. Should you decide to purchase them, and you don't use Profoto equipment, please make sure your strobe's manufacturer makes a speed ring that will accommodate them.

They can be used as a main light, with a different look from any other softbox. See **image 1.5**.

Quality softboxes have an additional layer of diffusion—an internal layer of nylon called a "baffle" that diffuses the light even more before it reaches the front of the box and exits. When buying softboxes, be sure to check that the corners are heavily reinforced to withstand the constant pressure from the rods that connect the box to the speed ring.

UMBRELLAS

Most umbrellas spread light by acting as a reflector. The light itself is aimed away from the model and beamed into a reflective fabric shell.

White is the most common umbrella fabric. Silver provides a slightly "snappier" look with a bit more brightness. A silver umbrella will, almost always, impart a slightly different color to the scene, necessitating a custom white balance but potentially skewing the color of all other lights. Gold reflective umbrellas are available, but they significantly warm the color of the light. Consequently, you may not want to use one for everyday images. This sample was shot with a white umbrella. See **images 1.6** and **1.7**.

The other common umbrella style is called "shoot-through." When using this style of umbrella, the light is actually aimed at the subject, passing through the translucent fabric of the umbrella and onto the subject. While it functions much like a softbox, the light the shoot-through umbrella emits is not as soft as that from

LEFT—IMAGE 1.6.
ABOVE—IMAGE 1.7.

LEFT—IMAGE 1.8.
ABOVE—IMAGE 1.9.

a softbox because there's only one layer of diffusion. Most softboxes, at least the quality boxes, have a second, interior layer of diffusion. See **images 1.8** and **1.9**.

BARE-TUBED STROBE

Working without a modifier on the strobe can produce terrific results, from simulated sunlight to simply saturated color with deep shadows. As you go through the book, you'll see a number of ways to create great looks with bare-tubed strobe(s).

I've found the best position for the tube, with most gear, is in the 11 o'clock position. It avoids any reflection from the (usually) chrome casing at the base of the tube and produces a cleaner shadow. See **images 1.10** and **1.11**.

REFLECTORS

Basic Parabolics. Basic parabolic reflectors are usually included with the purchase of a strobe head. Most are 6 or 7 inches in diameter and designed to throw a hard light evenly over the subject. These are not generally recommended for portraiture (there are exceptions, of course) but are used along with umbrellas or as fill or bounce light. See **images 1.12** and **1.13**.

Grids. Very cool little toys, grids are honeycomb-like devices, about ⅜ of an inch thick, that reforms light that passes through them to a straight line, expanding it in a specified amount from its center. Depending on the manufacturer, sets of grids for parabolic reflectors may be purchased individually or in sets, in a range from 5 to 40 degrees (grids for beauty bowls are not as numerous). The specified degree means that, when a par-

abolic is fitted with, say, a 20 degree grid, the light will expand from the center of the reflector at 20 degrees.

Grids can be used to create spotlight-like effects, as controlled hair or accent lights, or to skim across a surface. One of the great features of grids is that they can throw bright accents from behind a subject yet keep light from striking the lens, which could produce flare.

Many grids will fit into many manufacturer's parabolics. They are sort of a one-size-fits-all modifier. Some manufacturers make a parabolic specifically to hold grids. See **images 1.14** and **1.15**.

Beauty Bowls. Beauty bowls (also called beauty dishes) are large reflectors that have a baffle in front of the strobe head that reflects direct light back to the sides of the dish. The result is a direct but softer light

ABOVE—IMAGE 1.10.
LEFT—IMAGE 1.11.

ABOVE—IMAGE 1.12.
LEFT—IMAGE 1.13.

ABOVE—IMAGE 1.14.
LEFT—IMAGE 1.15.

ABOVE—IMAGE 1.16.
LEFT—IMAGE 1.17.

than one would get with a basic parabolic. Beauty bowls are usually at least 18 inches in diameter, though some can be purchased that are 24 inches or larger. They are pricey, as are their accessory grids, but they are more than worth it for the quality of light they produce. Some manufacturers' beauty bowls allow the center diffuser to be removed for a more contrasty light source.

I use beauty bowls in a number of ways but find them especially valuable as hair lights when used with a grid. This image was made with the grid from the predetermined distance of 6 feet. See **images 1.16** and **1.17**.

Panels and Collapsible Reflectors. As you will see, I use a number of reflectors in my work. My favorites are bookends—two pieces of 4x8-foot foamcore taped together along a common spine. You'll see many examples of how I work with these, especially my favorite and my own invention, the bookend bounce, in chapter 3. See **image 1.18**.

I also use a number of Lastolite's collapsible reflectors. Usually meant for bouncing light when working outdoors, I've found these wonderful gadgets extremely useful for studio work. See **image 1.19**.

A word of caution: Always custom white balance whenever you change a modifier on the main light. Clients will put up with (probably not even notice) minor color variations on hair or background lights but will shy away from off-color main lights. They may not know why they don't like the shots, but they will know there's something wrong.

ACCESSORY ARMS

I've found accessory arms, essentially short poles that clamp over light stands, to be invaluable tools in the studio. I have a number of these, under the Avenger label, that do a great job for me. Some are engineered with clamps for reflectors, some are just rods to which I can attach reflectors, flags, or whatever. Two of them together, raised to the same height and pointed to each other, can support a roll of background paper or a cloth background. Depending on the weight of what is being attached, a sandbag or counterweight may be necessary to keep the stand from falling over. See **image 1.20**.

Astute readers will realize that I've written about some of this equipment before. I apologize if I am repeating myself, but it's necessary information for new readers. Believe me, this little chapter is only an informational introduction to a beautiful, compelling, and artistic lighting adventure.

IMAGE 1.18.

IMAGE 1.19.

IMAGE 1.20

2. PROPER MAIN LIGHT METER PLACEMENT

I've written quite extensively in my blog (www.chrisgreylighting.com), monthly columns, and other lighting books about the value of using a calibrated meter and/or proper light meter placement. Proper placement will deliver images with a full tonal range, the richest possible range, and give you the most options for postproduction whether you shoot RAW or JPEG. You can check out my book, *Christopher Grey's Studio Lighting Techniques for Photography,* for a more lengthy explanation of calibration and metering techniques. I don't want to repeat myself too much; it takes space away from the actual lessons I wish to present and raises the ire of some peer reviewers, who will take the opportunity to off the critique, "He wrote this before, and I only want to read new stuff."

Still, I know that not all of you read everything I write, even though I think you should (this is where a less proper editor than mine, the outstanding Barbara Lynch-Johnt, would allow the insertion of one of those irksome, winking emoticons), so I think it's necessary to use a few pages to go over the information once again.

The correct position of the light meter determines the correctness of exposure. Indeed, there's a reason why incident light meters utilize a plastic dome to see the light before it hits the meter's sensor, and that reason is undeniably easy to understand; the shape of the dome mimics the shape of the face, and that shape reads the strength of light and shadow relative to a face and gives you a correct and proper f-stop for your camera. It makes no difference what color of skin you're working with because a correctly metered light will be a perfectly exposed light, and any skin color will be properly represented.

So, what is the correct position of the meter's dome? In the vast majority of circumstances, the place to hold the meter is directly under the subject's chin and aimed at the camera. This guarantees the meter reads the three zones of light—the specular highlight, diffused highlight, and transition zone—with an equal balance. The result, if your meter is calibrated, is an exposure that's so perfect you can go straight to proofs without tweaking Levels at all. When you're using a calibrated light meter, the amount of time you'll save is enormous. You will be confident enough with your metering techniques to avoid shooting RAW files entirely, if you wish.

Let's back up for just a minute. RAW files are the digital equivalent of a film negative, allowing you up to 2 stops in exposure compensation. RAW files are a digital gift because in tough shooting situations they can really save your bacon. Each RAW file is worthless by itself, however. It must be "processed" via digital software before it can be used as a JPEG, TIFF, or any other format.

As you know or can imagine, the amount of time required to process a large batch of RAW files can be enormous. Imagine a wedding photographer who shoots two or three thousand shots in RAW format over the course of the big day. Each shot may take 3 to 4 minutes to tweak, plus the time necessary to process the files into a TIFF or JPEG format (depends on the speed of your computer). Think about the amount of time you might save if you nail the exposure, especially in JPEG format, straight out of the gate.

If you feel you must shoot RAW, set your camera to shoot large JPEG files and RAW files at the same time. When you download, separate the RAWs and JPEGs into separate folders. Look at the JPEGs first. If you find JPEGs that need to be tweaked, use the RAW files to do so. If the JPEGs are fine, trash the RAW files or just burn them to a disc. Your time savings will be huge.

Now, back to our regularly scheduled chapter.

Metering for correct exposure in the studio is quite easy. I've photographed a few test images just to show you how foolproof it can be.

Let's begin with the light set at zero degrees to the lens axis (i.e., directly over the lens). I used a simple

parabolic reflector as a modifier for this test. It's rather contrasty, but it will demonstrate the principle nicely.

In **image 2.1**, you'll see there is a full range of tones, from the bright whites of the subject's teeth through the shadows of her hair.

The correct position of the light meter, in at least 90 percent of all situations, is directly under the chin and aimed directly at the lens. This will guarantee the meter will read all three zones and deliver an average reading that will give you a proper representation of those zones. See **image 2.2**.

At 22.5 degrees from center, the angle of incidence begins to change. You may have been taught in photo class that the "angle of incidence equals the angle of deflection," and this is absolutely true. The meter angle stays the same, straight on to camera, but you begin to see some changes in the specularity of the light because it's now aimed at different planes on the face and reflecting directly into the camera from some of them. See **image 2.3**.

At 45 degrees, the shadows deepen because there is no fill on the shadow side. The exposure, measured with the meter still aimed at the camera, still produced a perfect exposure when the strobe generator was adjusted to the target exposure, f/10 for this example. See **image 2.4**.

IMAGE 2.1.

At 60 degrees, which is more than most attractive portraits will tolerate, a meter reading aimed at the camera still yields a beautiful result. Shadows and highlights are properly represented, even though the image is very contrasty. See **image 2.5**.

So, what happens if we aim the meter at the light? At 60 degrees, what can the difference be, after all? Interestingly, the difference can be quite major. When you aim the meter at the light, you will only measure the brightest part of the light, not the average of highlights and shadows we've been measuring so far. With the meter aimed at the light, note the difference in shadow density and highlight brilliance between the previous examples. The inference is clear: most circumstances do not require the meter to be aimed at the light. Aiming it at the camera will produce more consistent results almost all of the time. The first image was made at the previous aperture, the second was made with the reading given by aiming the meter at the light, not at the camera, a ¼-stop difference. See **images 2.6** and **2.7**.

The easiest way to add fill light to your image is to bring in a white bookend or any other kind of white fill to add light to the shadow side. I've never been a fan of adding another strobe as fill. I much prefer a fill card of some kind because it will not add any shadows of its own. Be advised that, even at 3 feet away from the subject, the extra light that bounces in will affect the overall exposure. In this case, introducing the bookend added ⅓ stop of light to the overall exposure, which meant I had to either take the exposure down at the source (as I would recommend) or move the main light straight back a few inches. Either approach will maintain the ratio of any other lights that may have been set. This image, metered with the dome aimed at the camera, is a perfect example of how bounce fill can open up the shadows without looking like a second source of light. See **image 2.8**.

Metering a profile is different in that it's one of the few times you'll need to aim the meter at the light rather than the camera. This assumes that the light is coming from in front of the profile (and from the side,

IMAGE 2.2.

IMAGE 2.3.

IMAGE 2.4.

IMAGE 2.5.

IMAGE 2.6.

IMAGE 2.7.

IMAGE 2.8.

IMAGE 2.9.

IMAGE 2.10.

IMAGE 2.11.

relative to the camera). When the light is coming from any direction less than the 60 degrees we previously discussed you can meter, with confidence, with the dome facing the camera.

When the light is coming from 90 degrees to the side, if we were to meter with the dome aimed at the camera, the amount of shadow would throw off the accuracy of the reading, causing a poor exposure. See **images 2.9** and **2.10**.

Once you're satisfied with the reading and f-stop, set and meter any other lights you wish to use. I reintroduced the white bookend and added a hair light, powered to the same f-stop as the main light. A small piece of black foamcore, mounted on an accessory arm, created a flag that blocked off part of the light striking the background. The result (**image 2.11**) is a visually interesting and lovely image. This is a perfect technique for many portrait applications, from beauty and glamour to graduation portraiture.

3. WORKING WITH ONE LIGHT AND FILL

How many lights do you need, anyway? You might be surprised to learn that you can do an exemplary job with very few lights—often only one—provided you understand your equipment and why it works the way it does. Understand that I'm not talking about an on-camera flash; those small, specular sources that throw hard shadows and bright highlights. Ideally, you'll need at least one studio strobe and at least one quality modifier like an umbrella or softbox, and the larger the better.

But first, a little background.

Beauty and glamour photography frequently relies on soft, open shadows to show the subject in a beautiful and youthful manner, and this is usually accomplished by using a large, diffused light source. It is important to note, though, that placing a large source far from the subject will make it small relative to the subject and will make it act like a small source. For a thorough and exhaustive investigation of this phenomenon, please see *Christopher Grey's Studio Lighting Techniques for Photography.*

I've heard many so-called formulas for determining the optimum subject-to-light distance for softboxes, some of which might require a degree from MIT to understand. In my opinion, the optimum distance equals the sum of the height and width of the box. Using my homespun formula, a 2x3-foot box would be placed 5 feet from the subject, while a 4x6-foot would require 10 feet to throw light without specular highlights but with perfectly defined yet open and soft shadows.

The effect of the light-to-subject distance can also be seen when using an umbrella, another modifier most photographers have. The most frequently purchased umbrella has a 36-inch diameter, but if you're in the market for them or want to add to your existing stock, I'd recommend that you purchase the largest one you can find and afford. The additional size means you can move the umbrella farther away while maintaining a softer look. You can also buy what are known as "shoot-through" umbrellas, made with translucent material. Unlike traditional umbrellas, shoot-throughs are aimed at the subject, acting more like a softbox than an umbrella.

We've all heard of the Inverse Square Law (even if we've never understood it), which states that light that travels twice as far from point B to point C as it does from point A to point B will be only ¼ its strength when it gets to point C than it is at Point B. In simple, practical terms, this means that a light that's placed

IMAGE 3.1.

IMAGE 3.2.

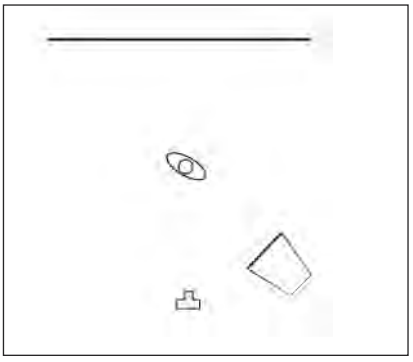
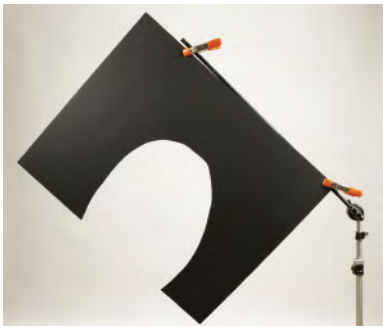


DIAGRAM 3A.



ABOVE—IMAGE 3.3.
LEFT—IMAGE 3.4.

close to a subject will lose its strength rapidly, maintaining a constant f-stop value over a very short distance. Conversely, a light that's placed farther away will maintain a constant f-stop value over a greater distance. This phenomenon is known as "depth of light," and it is something to be exploited when envisioning an image.

The bottom line is that you can be extremely creative with minimal equipment when you know how you can change the characteristics of the light that's produced.

Let's take a look at some terrific ways to work with a single light.

Perhaps the most important lesson to be learned when working with a single light is that it can be made to look like more than one source. This can be accomplished in a number of ways, with one of the simplest being the use of various bookends and reflectors.

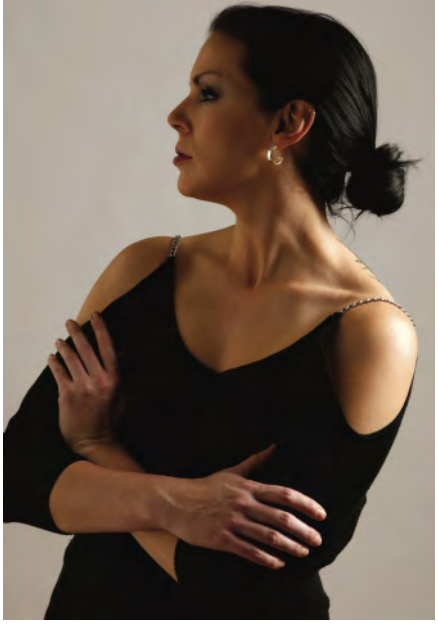
By itself, **image 3.1**, made against a white seamless background, is dramatic but lacks detail that would make it more interesting. As you can see in **diagram 3A**, my medium softbox was set to camera right, racked high enough to get a graceful nose shadow and placed at a distance of 7 feet from the model. My model was placed about 7 feet from the background, to be certain that enough light would fall upon it to keep it bright enough to show the shape of her shadow side but dark enough so the image would have a sense of depth.

Simply adding a white bookend to the shadow side softened and opened up the dark tones, giving the impression of a second light. I prefer reflectors over additional lights because extra sources tend to show secondary shadows on the opposite side of the nose and double catchlights in the eyes. The effect of reflectors is much softer. See **image 3.2**.

You can also change the shape of the light falling on the background by inserting a bookend between the main light and the background. For this image, I quickly cut a shape into a black piece of foamcore, attached it to an accessory arm on a light stand a few feet from the main light, just behind the model, then moved it into place to keep about half of the light off the background in those places where I wanted it reduced. It was close enough to the main light to guarantee the shadow on the background would be soft and undefined. Moving the form closer to the background would sharpen the shadow line. Note how the gobo shadow gives the impression of a second light on the background. See **images 3.3** and **3.4**.

Let's change things a bit and move the light to 90 degrees to the camera, so it's essentially behind the subject should she turn her head to profile. This is a variation on the broad light position, where the light comes from behind and across the side of the face that's presented to camera. Notice how beautiful her profile looks when in shadow, as well as the sense of mystery achieved from lack of detail. See **image 3.5**.

This sense of mystery may be too much for many images, and you may wish to use fill to open up the deep



LEFT—IMAGE 3.5.
FAR LEFT—IMAGE 3.6.

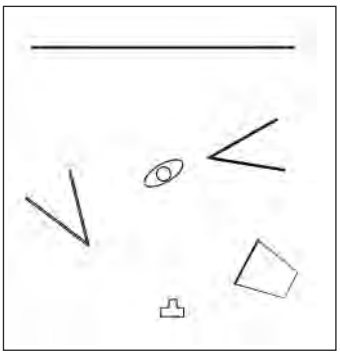
shadows. A bookend, in this instance, may add too much light or not enough contrast (depending on what you're trying to achieve), although it is soft and beautiful light. You will be able to vary the effect by moving the bookend closer to or farther from the model. **Image 3.6** was made with a bookend far enough from the model to bounce back –1 stop of light.

I use the next lighting scenario quite often, just because it's so easy and versatile. By changing the three elements (the main light modifier, type of fill, or distance of the main light from the subject), I'm able to create a wide variety of looks. This image, made on a different shoot, utilized a painted canvas background, a smaller softbox (2x3 feet) set very close to the model (but not aimed directly at her face), and a white bookend set about 5 feet from her, far enough away to keep the shadow dark but close enough to reflect a little detail, –1 stop, into the model's camera-left side. I also inserted a black bookend at camera right to break up the light falling on the background. See **image 3.7** and **diagram 3B**.

Most images are made with the main light positioned above the model's head, to produce a graceful nose shadow. As long as you're mindful of where the shadows fall, you can place the main light at other elevations, too. For this example (**image 3.8**), I used a 3x4-foot softbox but set it low, with its lowest edge just a few inches from the floor and angled up toward the model. The light was placed far enough from the model so it would also light the background behind her, about 4 feet away. I also set my model closer to the background than usual, about 5 feet, to maintain a more even light. I did not use a bookend or other fill, preferring to let the shadows go dark.

Having such a low main light proved to be more versatile than one might think. By reversing the pose, asking my model to angle up and away from the light, the non-filled shadows created a very dramatic image (**3.9**).

As simple as these principles appear, they can be easily used to create outstanding drama.



BELOW—IMAGE 3.7.
LEFT—DIAGRAM 3B.

IMAGE 3.8.

IMAGE 3.9.

The bookend is a large, broad platform that will bounce soft light. For a tighter and more contrasty fill, try a small reflector—silver, white or otherwise—and aim the bounce at the model's face. I use a number of Lastolite reflectors (www.lastolite.com) in my studio, but the brand is not as important as the size; the smaller the size, the less area will be accented, and this is another trait you can exploit to match your personal style. As I did with the bookend, you should make exposure strength tests with your gear so you'll have a better idea of what to expect.

BUTTERFLY LIGHT WITH THE SUBJECT CLOSE TO THE BACKGROUND

Butterfly light, the term given to light produced from a source placed high and directly over the lens axis, is beautiful for women. As a single-source light, it can produce wonderful images either when the model is placed close to the background, so as to include her shadow in the composition, or far enough away to isolate her from the background so her shadow has no effect. With the latter, I think you'll want to keep the light on the background bright enough so the background looks deliberately lit. Also, when using this scenario on a dark background, be careful to keep enough light on it so as to show the model's complete shape, even in the deepest shadows.

For this shoot, I placed my model into a corner of the studio that I'd painted semigloss gray. Even though semigloss paint may show some reflection from lights, especially with darker colors, the overall effect has more visual impact than flat latex wall paint, an important quality for much beauty and glamour work. Also, painted sheetrock has a flatter texture than seamless paper, which contributes to the look of the final image.

For this shot, the model was very close to the wall, as you can see from her shadow. The large softbox was my only light. It was positioned behind and above me but close enough to the model so it produced only broad, soft shadows. Because my softbox was set horizontally,

RIGHT—IMAGE 3.10.
FAR RIGHT—IMAGE 3.11.

and parallel to the wall, the exposure was consistent across the entire 5-foot painted expanse. My model was free to move about within that space as she wished, provided she stayed close to the wall. If she had moved more than a few inches toward me, there was a danger she would begin to overexpose. See **image 3.10**.

With the light set behind me and the camera handheld, I was able to move around within the frame. This meant I was not tied down to the butterfly position and could vary the direction of the source by not having to move it. This degree of versatility and adaptability can be crucial to the success of fashion and beauty shots. In this case, I was able to use a number of shadow and wardrobe variations to produce a great series of images. See **image 3.11**.

Large or medium softboxes can readily be used anytime you wish to light a large portion of the model with minimal shadow contouring, regardless of the model's position. Should you pose the model reclining on her back, you must correlate the position of the light to the model's facial pose and her nose shadow. In many scenarios, photographers light the model from the side, with the light centered. This is a mistake. When the light is sourced from anywhere near the model's face (as it would be if aimed at her side), the shadow cannot travel down the nose as it should. It can only travel sideways or, worse, if it's placed below eye level, up toward the forehead.

You can get a much more even spread of light by "feathering" it over the model, which is to say that after you set it to get the right shadow, you'll actually aim the strobe head toward her feet. Even though you're working with a softbox, the light will not be even if it is not aimed properly. In fact, given the spread of light from a softbox, if you simply aim the head at your model's face, you're actually wasting half the output. Use your meter to gauge the spread of light.

SINGLE UMBRELLA

Getting terrific results from a single source and umbrella is as easy as working with a softbox, although the results will look different. Umbrellas are designed to spray the light from a smaller source in all directions, expanding the illumination. This makes them difficult to deal with when the light must be controlled. In my opinion, therefore, umbrellas are not the best modifiers to use for background or hair lights.

The only controls we have when using a single umbrella are the angle of incidence to the model and the light-to-subject distance, which will determine the

IMAGE 3.12.

strength of the shadow and the consistency of exposure. For this image, I placed a basic, 36-inch umbrella on a boom and raised it to about 3 feet above and 3 feet in front of her. This woman is 6 feet tall, so I knew, with the Inverse Square Law on my side, that the light that made it to the floor would be ¼ the strength of the light that lit her face, a 2-stop difference. Since my intention was to not show her feet, I was confident I would have quality light that would gently fall off as it traveled down her body, with the emphasis on her beautiful face.

A word of caution here: keep an eye on the position of your model's head. Should she tilt her head down too far, the shadows in her eye sockets may be too dark. In **image 3.12**, the model stopped just shy of that point, but she looks good.

BROAD SOURCE FROM ACCESSORY FLASH

Please note that while this is an effective way to create a large source from a small one, it will require an external flash meter, as using auto or TTL settings on the flash will not give you the correct flash output to get accurate exposure (the flash unit will actually read the bounce coming back from the diffusion panel). You will only be able to gauge exposure correctly using a combination of manual flash mode and a handheld flash meter. Though it can be done, it presents a number of problems, not the least of which is waiting for the strobes to recycle. See the accessory flash diffusion discussion (chapter 6) for more information.

THE BOOKEND BOUNCE

I've written of this before, but it's worth repeating because it's such a cool and inexpensive trick.

Deadlines can be wonderful things. Some time ago, I was faced with a monthly column deadline and was dealing with a mild case of writer's block. As I paced the studio floor and glanced at my stack of bookends leaning against the wall, it occurred to me that I'd been curious to know if a bookend could be turned into a main light and how I might use that main light effectively. I had my column idea. I just had to figure out how to make it work.

I began by cutting a hole, about three times the diameter of my lens and at my comfortable shooting height, into the spine of the bookend. I knew that when a model was placed in front of it, the bookend's white surface would reflect light evenly over her. By itself, this could be a good thing, but I also knew that the completely white reflection would carry across her eyes, glazing her pupils and giving her that "model of the living dead" look we should always try to avoid.

To break up the reflection, I sprayed a radiating pattern of flat black paint, varying the length of the strokes between 1½ to 2 feet from the center of the hole. This would reflect black onto her irises, giving her eyes color and depth. See **image 3.13**.

Once the paint was dry, I set the bookend about 12 feet from the background, with the V opened toward the model. I put her in position, no more than 3 feet from the V and facing the cutout.

Next, I set up a strobe with a parabolic reflector on a boom arm and suspended it about 6 feet behind her, aimed at the back of her head but also toward the top of the bookend. If your model has deep-set eyes, the reflection can create a shadow above the lower orbit. It's easy to fix in Photoshop, but the idea is to keep postproduction to a minimum. An angle such as this means the light will mostly bounce down to the subject.

The distance from the light to the model meant that she would be evenly lit across the rim of her hair, shoulders, and back, and also that the entire bookend would

IMAGE 3.13.

IMAGE 3.14.

IMAGE 3.15.

IMAGE 3.16.

be awash with light, which would reflect back to her to light her softly.

The single strobe was shining directly onto the camera lens, which would produce more than enough flare to ruin my shots, so I hung a piece of black card, about a foot square, directly over her head on another boom arm, to throw a gobo shadow that covered the shooting hole. Now I was free to place the camera anywhere I wished within the cutout area without worrying about lens flare.

With the model in position, I placed the light meter under her chin and aimed it at the hole where my camera would be. The light reflecting from the bookend then became the main light for my shot. I knew that the light on the back of her head would overexpose whatever it hit, but I saw that as a necessary element of the shot, something that would add visual interest.

When you try this, you'll know from the first shot that you're seeing something unique. The wraparound bounce from the bookend acts like a huge ring light, spreading illumination evenly over the subject and lighting the background as well (anything darker than a medium gray will photograph black or almost black at the distance I've suggested), while the hair light, with its extreme overexposure, adds drama and contrast. Additionally, the eyes carry wonderful color and large, soft, catchlights. See **image 3.14**.

It's not necessary for the model to always face the camera. She'll be evenly lit no matter which direction she faces. With a scenario like this, a dramatic head tilt will equal a dramatic image. See **image 3.15**.

While I really liked the two-light look I'd achieved with only one light, I felt there was still room to improve the look, maybe to even give the impression of a third light.

You can stop in to just about any large hardware store and buy a box of lightweight, one-foot-square mirrored tiles that are meant to be glued to various surfaces. I taped a 4-inch nail plate to a single mirror panel and mounted it into a clamp on the second boom arm, in place of the black gobo. The mirror would serve as a

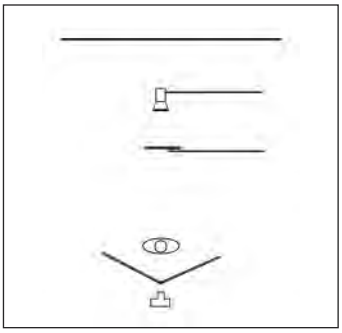


DIAGRAM 3C.

gobo to keep light off the camera and would also reflect light behind the subject, acting as a third, background light. See **diagram 3C.**

I've set this up many times since first figuring it out and the exposure results are quite consistent, given the distances I used. The light hitting the back of the head will be about 2 stops over the metered main light, and the light from the mirror will be about 1 stop over the main light. It doesn't matter, though. Soft but dramatic light is the goal; the only important light is that reflected from the panels. See **image 3.16**.

Be sure to do a custom white balance off the bookend. Foamcore yellows with age, which will affect the subject's overall color. Of course, if it gets too old and yellow, the other light in the image will look cooler, as blue is being added in the camera to compensate for the yellow the camera sees when white balancing.

MIRRORS AS MAIN LIGHTS

You can easily change the look of this one-light scenario by removing the bookend bounce panel and using the mirror to shine light onto the subject. When the mirrored light becomes the main light, the subject will still pop out of the background, but any portion of the background not hit by the new main light will appear very dark, as minimal light will be falling upon it. You will have to play with the angles a bit to get an attractive shadow on the model's face, and it might be a good idea to hang a larger gobo between the backlight and you, to give yourself a larger shadow to work under. See **image 3.17**.

Larger mirrors may also be used as fill or hair lights, although reflected light will have the same properties of the source. So, if the source is a hard light, the reflected light will be just as hard and shadowy, unless the mirror is somehow modified, perhaps with water-soluble dulling spray or diffusion material such as that made by Rosco.

Setting up a good lighting scenario takes time, thought, and pre-visualization. If I've been hired to produce just one look for a final image, perhaps a shot of a model in a specific composition (such as I might have to do for an advertising job), I'll spend additional time during the shoot watching the model's position and tweaking the lights and their ratios to the main light until the client and I are completely satisfied. However, if I'm shooting for stock, the model's portfolio, or just to play, I'll try to engineer potential variations into my scenario, to get as much variety out of it as possible. It's much easier to make small changes to get a different look than it is to relight an entire set, even when using only one light.

IMAGE 3.17.

4. BARE-TUBED STROBE

A bare-tubed strobe is about the closest one can get to a true "point" light source. Without any modifiers, not even a basic parabolic reflector, the light will emulate sunlight, and its specularity, sharpness, and deep shadows will increase as the light is moved farther from the subject. While this light may not be especially attractive for, say, a family portrait, it can be perfect for many other subjects. Those of you engaged in advertising photography should play with this lighting style, as it has recently become pretty popular.

The subject-to-background distance will determine the strength of the light on the background. The Inverse Square Law tells us that light traveling from point A to point B will be only ¼ as strong from point B to point C when point C is twice as far from the source as point B. This means that if we want the light to be evenly exposed over a wider distance, we must move the light farther from the subject.

To create our first image (**4.1**), the bare-tubed main light was set about 8 feet from the model, who stood about 8 feet from the white background. Notice how evenly the model is exposed from the top of her head and down her black outfit all the way to the bottom of the frame. Since the main light was placed almost directly over the lens axis, the white background is also evenly exposed but becomes gray because the strength of the light has been lessened by distance. If the main light metered f/11 at the subject, it would meter f/5.6 (¼ the strength of f/11) at the background.

We can use this principle creatively. To create **image 4.2**, the same snappy light was used, but this time it was placed about 4 feet from the model, who maintained her distance of 8 feet from the background. Two things happened because the light was placed closer: it lost strength more rapidly (look how it falls off about halfway down her figure), rendering the background darker, and the model's shadow began to creep up the background because the strobe itself had to be lowered to maintain the same shadow angle.

Bare-tubed strobes can throw quite sharp shadows, especially when the subject is close to the background, and you can control the sharpness of those shadows by changing the distance of the main light to the subject. The farther the main light is from the subject, the sharper the shadow will be.

When we go back to the original light-to-subject distance of 8 feet but snug the model up to the background, we can get an almost perfect white background

IMAGE 4.1.

IMAGE 4.2.

IMAGE 4.3.

IMAGE 4.4.

IMAGE 4.5.

and a terrific dark shadow. Bear in mind that you can never get a perfectly clean white background because the paper (or any other material) is not a perfectly clean white and will not photograph at a value of 255 unless it's been lit separately and slightly overexposed. Even though this exposure is darn near perfect, the value is about 250 at its brightest, with still enough detail to register on a print (although a little more work in Photoshop would help). Where the light falls off, near her camera-left thigh, the value is about 220. Doubling the main light-to-subject distance to 16 feet would increase the evenness of the exposure by 50 percent and increase the apparent sharpness of the shadows. See **image 4.3**.

I prefer to set my main light with the strobe tube angled sideways to the model, not head-on. I don't want any of the light to kick off the front of the unit and soften the shadows. Although the manufacturers don't recommend that you do this, you may find you'll get an even sharper shadow if you remove the dome that covers the flashtube and modeling lamp. The dome is there to protect you and your subjects should the tube or lamp explode when triggered. That's never happened to me, but take note that I'm not recommending it, either. It's your call.

Place your subject in front of a softbox that is at least large enough to cover the subject so you can extend the white (if needed) without having to do any major retouching on whatever parts of the model extend out of frame, and you can use the bare-tube technique to produce very interesting images with sharp, sunlight-like shadows against a pure white background. This is a lighting scenario that you don't see often, because it's generally not on anyone's recommended shot list. The bottom line is that it's pretty darn cool and should be

tried whenever you think you have a subject that deserves it. Of course, there are many derivatives of this technique, many of which you can discover for yourself, just by playing with your toys.

For the first image (**4.4**), I placed the bare-tubed strobe about 6 feet from the subject and about 4 feet over her head. You may think that this is an unusually high angle for a main light, and you'd be correct. For most applications, it is. However, you must balance the height of the light, knowing that most sunlit images are made with a higher source, against that of perfect portrait lighting. Of course, the shape of your subject's head and face, the angle at which the face is presented to the camera, and the effect you wish to achieve will help dictate the right spot for the light. Also, when you move a bare-tubed strobe farther back (to get depth of light, an even spread of light over a given distance), you'll have to raise it higher to get an appropriate and attractive nose shadow.

I'd placed my model about a foot in front of a very large softbox, a Lastolite HiLite. At 6x7 feet, it's a source large enough to wrap around the subject while providing plenty of white space on each side. I measured the output from the box and powered the main light to be 1 full stop less. This was my working aperture and guaranteed the background would be completely white without flaring into the lens and softening contrast.

Next, I added a beauty bowl to the bare-tubed strobe. The look of the light is similar, although the spread is more concentrated in an arc that extends from the reflector. Note that the falloff of the light looks substantially different than that from the bare tube. Also, as you can see, the shadows are a bit softer. It's just another option, but one with its own personality. See **image 4.5**.

Bare-tubed light looks great on black, too. My model was about 8 feet in front of a black paper sweep, and the strobe was about 6 feet to camera left. I'd flagged the light with a piece of black Roscoe Cinefoil to keep all light off the background. I'd also moved a black bookend in behind the model to absorb any light that might bounce back from a wall.

Because the light is strong and omni-directional, I clamped another piece of Cinefoil to a stand and created a shadowed area that I could move around in without fear of lens flare. See **images 4.6** and **diagram 4A**.

Like everything I write about, I encourage you to try the bare-tube look for yourself. It's one more bullet in your creative arsenal, and you'll find it's a very large caliber, too. Just spend some time playing with it to understand it.

IMAGE 4.6.

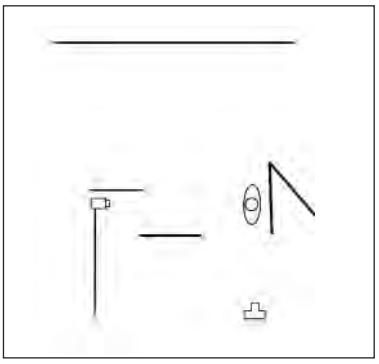


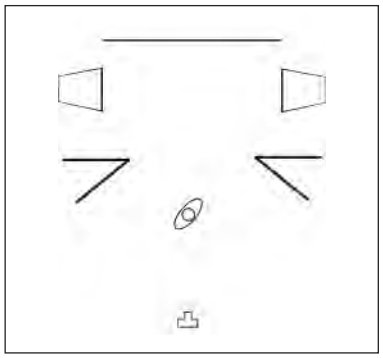
DIAGRAM 4A.

5. SILHOUETTES AND BACKLIGHT

There are few lighting effects more evocative than the silhouette. While showing line and form to great advantage, and without the visual detraction of many body "flaws," it's the very fact that so much of the image is left to the viewer's imagination that makes the silhouette so successful.

Just as there are many ways to approach a silhouette, there are many ways to light it. Let's begin with the simplest approach: lighting a white wall or background sweep. In my opinion, it's best to do this with softboxes because parabolic reflectors throw uneven light, usually with a slight hotspot, and we want to light the background as evenly as possible. Umbrellas can be used, but they tend to spray the light more than softboxes. If you use umbrellas, be sure to place gobos between the lights and the model.

DIAGRAM 5A.



In most lighting scenarios, it's difficult if not impossible to light the foreground as brightly as the background if you're using a simple paper sweep. Once you add light to the foreground, some will spill onto the model, ruining the silhouette effect. With a flat foreground/background, you'll have to do some Photo-

IMAGE 5.1.

IMAGE 5.2.

IMAGE 5.3.

shop work to get an even white. (Don't worry. It's not difficult, even if your model is wearing white clothing.)

For a perfect silhouette, you'll also need to keep spill from the background off the model by placing her as far from the background as possible. It's also a good idea to use gobos between the lights and the model, and my preference is black bookends. While it's almost impossible to avoid all spill, more control will allow for the darkest silhouette. Personally, I think a little wrap-around spill light makes a more believable silhouette, as it lends some dimension to an otherwise visually flat surface. If you prefer a darker silhouette, the easiest way to accomplish it is to move the model farther from the background, so any spill will fall off before it reaches the model.

Begin by placing two lights with identical softboxes about 18 inches to 2 feet from the background, with the height of the strobe heads equal to ¾ the height of the model, and at equal distances from the edges. As a starting point, aim the two lights at each other, rather than at the background. The idea here is to feather the light across the sweep, to get as even an exposure as possible. This will be easier if you can figure out how much of the background width will actually be represented in the image, which will depend on the focal length of your lens, how far the subject is from the background, and how far the camera is from the subject.

Begin metering at one end or the other, moving the meter in 1-foot increments and making a mental note of how the light falls. You may see distinct differences in the exposure readings of the light as you move from one side to the other, which indicates that one light or the other will need to be angled differently. Feathering a light takes practice and is usually best accomplished in small movements, but the result will be an evenly lit background. If you're feathering lights for the first time, you'll be amazed when you see the final angles of the light; it appears their placement defies logic, as you can see in **diagram 5A**.

Once you have the lights balanced and blocked off, set your camera ⅔ to 1 stop brighter than the meter reading. If your meter reads f/11, for example, an extra ⅔ stop means f/9, which will ensure that most of your evenly lit background will be too bright to register as a flat surface or to show any texture.

An easy way to get a more perfectly white foreground is to buy at least two sheets of shiny white tile board, a Masonite-based, 4x8-foot panel typically used as a bathroom wall covering. It's a tough and inexpensive material found at major hardware or remodeling stores. Lay the sheets on the floor so they overlap toward the background, to maintain a visually unbroken white surface. The tile board will reflect white light from the background better than any paper surface. You may also use sheets of white Plexiglas, but you should lay white paper underneath them as they are somewhat translucent. They will give you a cleaner, whiter reflection than tile board but cost about three times as much. Neither will present a "perfect" solution, however.

If there's any downside to using tile board or white Plexiglas, it's that you may pick up a reflection of your subject in the surface. Usually this extra reflection is desirable because it's somewhat unusual and something many photographers don't know how to achieve.

You'll get the deepest silhouette with both gobos in place, but the foreground will show a shadow. You can easily fix this in Photoshop. See **image 5.1**.

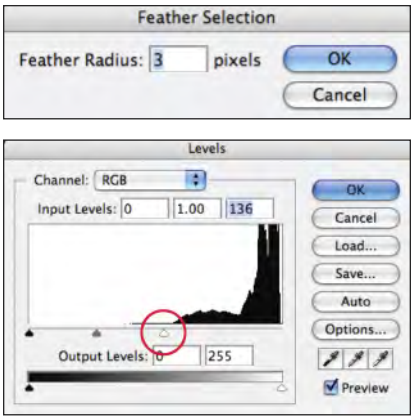
If you remove the gobos or reposition them to allow more light on the foreground, you'll add detail to the image as light wraps around the subject. Again, there will be some darkness in the foreground. I removed the camera-left gobo, adding detail to that side of the model and brightening the foreground. See **image 5.2**.

When both gobos were repositioned, the foreground was brightest, but the silhouette effect was diminished. Light spilled over and lit some of the model's face. The effect is not necessarily unwelcome, but it does change the look. See **image 5.3**.

A BASIC PHOTOSHOP TRICK

You can make slightly gray background areas in your images white by taking the time to make some quick adjustments in Photoshop. Here's how it's done:

First, select the light-gray areas using the Magic Wand tool. See **image 5.4**.



LEFT—IMAGE 5.4.
CENTER TOP—IMAGE 5.5.
CENTER BOTTOM—IMAGE 5.6.
RIGHT—IMAGE 5.7.

Once the area is selected, go to Select>Modify>Feather, and set the Feather radius from 1 to 3 pixels (the latter will provide a softer transition against clothing and may even help hold an edge). See **image 5.5**.

Use Levels to increase the brightness of the whites. If your subject is centered against the light, the brightest area of the image will be directly behind her and already be perfectly white. Feathering the selection will help retain detail in many of the delicate areas, like stray strands of hair. See **image 5.6**.

This trick will work with any silhouette technique, provided the spill light and exposure are controlled. See **image 5.7**.

SOFTBOX AS SOURCE

A large softbox (a medium softbox will work for tighter compositions) or a modifier such as a Halo may be easier to deal with than trying to evenly light a large expanse of background, although they present their own problems. If your softbox can be equipped with an interior diffuser, please attach it if it's not already in place. You'll want the extra diffusion to even out the light as much as possible.

Begin by metering the flash output directly from the softbox fabric. If your flash meter allows it, retract the dome so you can lay the meter flat against the fabric. This will give you the most accurate reading of the light's strength since there are no opportunities for even the mildest shadow along the contour of the dome.

For accuracy and control, power your strobe to read to a whole stop or a perfect third, as doing so will make any testing easier to document and understand.

I'd recommend you set up a test, beginning with the metered aperture value and shooting one image per ⅓- or ½-stop aperture increase. Examination after downloading will give you an excellent idea of how your subject will be affected by various exposures. This image was made with an exposure 1 stop greater than the

IMAGE 5.8.

IMAGE 5.9.

IMAGE 5.10.

metered value of the softbox. Notice there is a slight vignette at the corners, where the spread of light out of the box is weakest, but that's a minor problem that can be easily fixed. See **image 5.8**.

PLEXIGLAS AS SOURCE

One of my favorite lighting tricks for partial silhouettes is to hang a 4x8-foot sheet of ⅛-inch thick milk-white translucent Plexiglas about 4 feet in front of a large softbox (a medium softbox will work but may confine your composition slightly), then place my model directly in front of it. The Plexi acts more like a large fiber optic, spreading the light more evenly and consistently than a fabric diffuser itself. It will flare, but not as much as a standalone softbox, and will produce nice edges with wraparound light. See **image 5.9**.

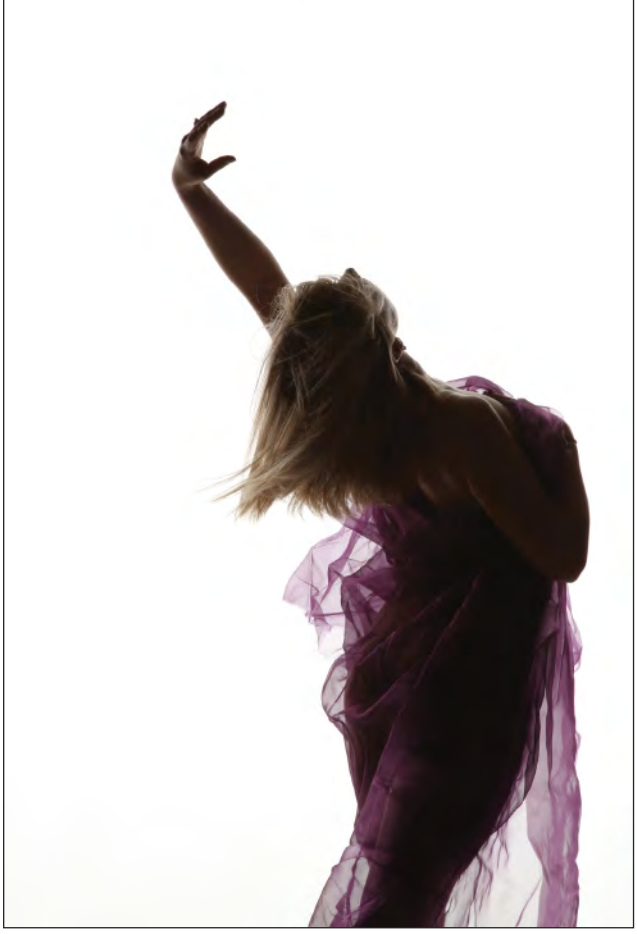
You don't need to buy an expensive background hanger mechanism to hang the Plexiglas or seamless paper. You need two light stands (extendable to at least 8 feet), four squeeze clamps, and a 10-foot length of aluminum fence tubing (available at any major hardware store). Place the clamps over the tops of two light stands and place the aluminum tube across the handles. With the stands set just below 8 feet, simply hold the Plexi against the tube and use the other two clamps to anchor it to the tube, and you'll be in business.

My preferred exposure for almost everything I shoot this way is ⅔ to 1 stop over the meter reading, which is made as it was for the softbox, with the dome retracted and flat against the plastic, aimed at the light, and metering the light that comes through the diffusion panel. At +⅔ stop, the background is perfectly lit, almost totally white, and with enough wraparound to illuminate the inside edges enough to see skin tone and add dimensionality. The Plexiglas is difficult to hang (it's easier with a second pair of hands), but it's worth it for the quality of the light you'll get from this setup. At the time of this writing, a 4x8-foot sheet of ⅛-inch Plexiglas cost about $75.00. Look under "Plastics" or "Plastics Supply" in the Yellow Pages for the nearest vendor or check the Internet for availability in your area.

You may, of course, make silhouettes against any other color background, including colored Plexiglas, or cover the source with a colored gel. You may also place white tileboard on the floor to reflect whatever color comes through.

ADDING DETAIL

Regardless of the method used to create a silhouette, detail can be easily increased by moving in a white bookend or other reflector to catch some of the light coming through the background and send it back to



LEFT—IMAGE 5.11.
TOP—IMAGE 5.12.

the model. The amount of light will vary depending on the type of reflector used, its distance from the subject, and how much of the form you wish to reveal. See **image 5.10**.

LASTOLITE'S HILITE

Another of my favorite methods for producing beautiful silhouettes, as well as perfect high key backgrounds, is a super-large softbox made by Lastolite, the HiLite. Available in a number of sizes (mine is 6x7 feet), it's a softbox that works like none other. For example, lights are loaded into the side of the 18-inch deep unit, so the footprint on your studio floor is smaller than what you'd expect for such a large piece of gear. Also, the fabric is different from that of a typical softbox and will disperse the light more evenly. The best part? It collapses into a shape that's ¼ its setup size and comes with a carry case for location shooting. See **image 5.11.**

When it's used without any reflectors or bookends, the silhouette effect is fantastic. **Image 5.12** is from a series of shots for which the aperture was set 1 stop brighter than what was read off the background. The special fabric of this box spreads light so evenly that it produces a perfect, clean white, from corner to corner when used in this manner.

You can re-create, to some degree, the look of a supersoft softbox by hanging a large sheet of cotton cloth, as tightly as possible to avoid wrinkles, from light stands and/or supports. You will almost certainly have to do some Photoshop work when dealing with fabric in this manner, but it's simple. The only problems you'll see are minor wrinkles in the fabric at the edges and, perhaps, a slight shoot-through view of the light behind the fabric.

I once bought a huge bolt of fabric, about 8x40 feet, which I used to ring 75 percent of a large machine. I lit the machine through the cloth, using the next technique in reverse, creating soft highlights and even light over its entire surface. I've used this piece of cloth many times as a makeshift background. While I can't use its full length in my studio, I have used it to create backlit backgrounds larger than the HiLite. I've also found that, if I double it up, I won't have the same problems with shoot-through light, though the amount of light coming through the cloth will be significantly reduced.

I used my largest traditional softbox (4x6 feet) and set it about 8 feet behind the sheet of fabric so the light would spread evenly over the back of the cloth. The model and the foreground were set immediately in front of it to appear as if a stained and finished piece of plywood, the "stage," was butted up against a pure white background.

The exposure was measured, into the cloth, at the center of the set. I opened up my camera's aperture 1 stop over that reading. Even so, I needed to use the

IMAGE 5.13.

IMAGE 5.14.

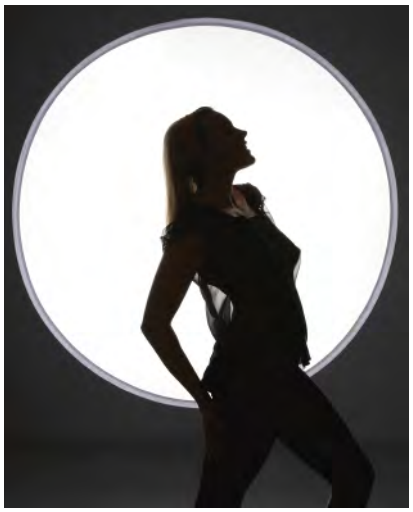


IMAGE 5.15.

Photoshop technique described earlier in this chapter to get a perfect background. One other note: because the background was so much larger than the HiLite, there is more wraparound light in play. The result (**image 5.13**) is a somewhat diluted silhouette, but it's still gorgeous.

We choose our models for a number of reasons, both physical and social, and we'll often structure the shoot to highlight their physical attributes. Depending, of course, on what it is we wish to accent, a strong backlight can become a remarkable background, especially when paired with an additional accent light that will create a partial silhouette.

The base exposure for **image 5.14** was 1 stop over the measured meter reading at the fabric of the HiLite. An additional light, a beauty bowl (without a grid), was attached to a boom and positioned at a slight angle over the model's head to light her beautiful red hair. It was powered to the working f-stop of the camera, 1 stop over the power of the HiLite.

TRANSLUCENT DIFFUSER

You could certainly use a translucent diffuser as a light source. Smaller sources, such as some made by Photoflex, will work well because of their size. Smaller sources mean less wraparound light, so the silhouette will be more intense and show less detail.

Begin by hanging a translucent diffuser from a frame or from a boom arm. The diffuser may be circular or rectangular, that's up to you, and you may need to retouch some edges if you want the diffuser to appear as if it's not supported. I used a large, circular diffuser for **image 5.15**, hanging it off a boom arm and digitally removing the strap and support in my final image. I set a strobe with a 40 degree grid on a stand about 4 feet behind the diffuser, aiming the light dead-center to the white field, illuminating the diffuser completely, but without spill. It was a smooth and easy solution to create a silhouette with minimal wraparound light, mostly because the source, the diffuser, was relatively small compared to others that you've seen, but also because the fabric of the diffuser is different from that of regular softboxes or the HiLite. As you've seen from these samples, every fabric, like every modifier, has its own personality.

The diffuser was clamped to a boom arm by its strap and lit with a 40 degree grid, aimed at the middle of the diffuser from about 5 feet behind. All traces of the strap and light stand have been retouched out. The camera's aperture was set to 1 stop over the actual value of the light coming through the material.

6. ACCESSORY FLASH DIFFUSION

Even if you have only one flash unit at your disposal, you can create stunning imagery if you plan your attack in a logical fashion.

We know, of course, that large, broad light sources will deliver an even spread of soft light. These sources are almost always large softboxes or umbrellas and, while there is definite value in having studio equipment available, here are a couple of ways to approach beauty and glamour photography with minimal equipment.

You will need to have an accessory flash with some power behind it. To be as accurate as possible, you'll also need a flash meter. The flash will need to be set to manual mode; when it's in auto or TTL mode and is aimed at something other than your model, it will limit the strength of the flash for either what bounces back from the subject to the camera or the amount of light that falls upon the subject. If you introduce diffusion or reflective material and aim the strobe at it, the strobe will read the light as it affects the material, not your model. The inevitable result is underexposure. Using the flash at full power in manual mode ensures consistent and measurable power output.

I keep an older, column-style Metz flash around for those moments when I need a small but powerful source. My model is the CT-2, expensive when it was purchased (and a real workhorse) but quite inexpensive now on eBay or through dealers that specialize in used equipment. If you decide to buy one of these units, inspect it first. You'll want as clear (nonyellowed) a flashtube as possible. These units can be refurbished by the manufacturer, but it will add expense—and you'll almost certainly have to buy a new battery too.

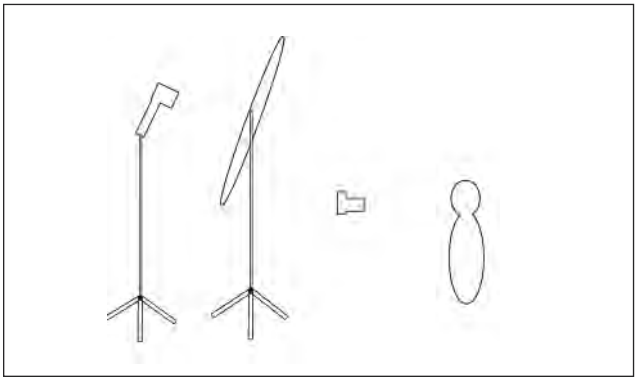


DIAGRAM 6A.

Of course, you can use a single studio strobe, even your camera manufacturer's accessory flash unit (if it has enough power), in exactly the same fashion, as I'll demonstrate with my old Metz unit.

First, and to demonstrate the difference between modified and unmodified light, I've set the Metz on a stand and aimed it at the model. I'd painted the wall behind her with a semigloss latex enamel to get a bounce-back reflection from the light. In manual mode, I metered the flash output, measured at her chin with the meter's dome aimed at the camera, and set the aperture accordingly.

It's not bad light. The only potential problem is the contrast of the flash, especially the nose shadow. I'd engaged a professional makeup artist for my model, so the amount of specularity on her skin from the flash is minimal. You may not be so lucky when your subjects do their own makeup, so you'll have to take a close look at an enlarged LCD image (knowing that the LCD is not the final arbiter of exposure and contrast) and make a decision whether or not to send the client back to the dressing room for more powder. See **image 6.1.**

For my second setup, the flash was placed on a stand and positioned behind the camera, about 3 feet behind and aimed at the center of a 52-inch white Photoflex diffusion disc (see diagram 6A). Depending on the flash you use, you'll have to do a little testing to find the optimum flash-to-diffuser distance. You'll need to have the flash far enough from the diffuser to cover the material but not so far as to spill light on the subject or the background, at least within the image frame.

There's a tremendous difference in "feel" between the two images I created. The first shot (**image 6.1**),

nice as it is, is not nearly as soft as the second (**image 6.2**). The second still shows the bounce-back reflection, but the overall look of the light is more glamorous.

I wrote about accessory flash diffusion techniques more extensively in *Christopher Grey's Advanced Lighting Techniques*, and I'd encourage you to check them out. If you typically work with a minimal gear set, you'll want to try some of them. The results are terrific. Though accessory flash is inexpensive, working with it presents a unique set of problems. If you're serious about shooting, you and your clients will be well served by your purchase of better gear.

Over the past few years, many manufacturers have made significant progress in creating modifiers for accessory flash units. While I still believe that no accessory flash (or any series of flash units slaved together) can take the place of studio strobes, I will admit that, when properly planned and understood, small units can do a good job within their limits. If you can live with long recycle times, lower power, and the difficulties and expense of trying to make them perform like something they're not, well, bang away. Personally, I think your best bet is to buy a set of studio strobes, even of entry-level quality. I think you'll be much happier in the long run, even if your entry-level strobes are slightly inconsistent from flash to flash (which they almost certainly will be).

They say it's a poor carpenter who blames the tools. I say a good carpenter avoids poor tools.

IMAGE 6.1.

IMAGE 6.2.

7. THE DOUBLE MAIN LIGHT

It's both possible and practical to use more than one light and modifier, together, to create a main light that will give your images a look that's beautiful and unusual. Yes, it does take a little more time because you'll need to correctly meter the situation, but it's worth it. You're reading this because you want to learn some tricks that will outsmart your competition. If an extra few minutes does that, it's time well spent. If your competition never buys this book, well, that's even better (for you, not for me).

I've created my test setup with one light fitted with a medium softbox and a second with a basic parabolic reflector and 10 degree gridspot. I first set the light with the softbox in place, using the modeling lamp to get the correct angle for a good shadow. When I was satisfied my model's face would be nicely rendered, I placed the second light at exactly the same angle, directly in front of the softbox and butted up straight ahead of the first light. See **image 7.1**.

With only the softbox light turned on, I metered her face and made note of the exposure strength. This is important only because, even though the next light will determine the actual value of the light, I always try to power this first light to a perfect whole stop or perfect third. Adjustments will be more readily accomplished if I don't have to make more than minor (e.g., 1/10- or 2/10-stop) changes. This first image was made at what would be –2 stops from my final target aperture. Note that it doesn't matter what your target exposure is—f/5.6, f/8, or whatever—that's up to you and depends on the limitations of your system or what you want to portray.

Next, I turned the softbox off and powered up the parabolic to 2 stops brighter than the reading from the softbox. A parabolic reflector is a strong source, throwing relatively hard shadows that really need to be softened for most images. When a softbox is used as an additional modifier, it will negate some of the hard look associated with a basic reflector while adding light to the periphery generated by that first light. See **image 7.2**.

Finally, I turned the softbox back on and metered the two lights together. Because the effects of light are cumulative, the resulting light meter reading was brighter than either light alone. I adjusted the softbox down, until I got to a perfect reading on the model's face. The light from the softbox is not as important as the light from the parabolic, but the final, working f-stop must be perfect to guarantee a correct exposure. See **image 7.3**.

So little light falls on the background that "tonal merger" is evident almost everywhere. Tonal merger occurs when the exposure value on the subject is the same as the value seen in the background. It primarily occurs when shadows merge with unlit backgrounds but can also be seen in high key photos, when light on the edges of the subject blows out to pure white and blends with a white background. Unless tonal merger is a planned part of the composition, it should be avoided.

I set a strip light off to camera left, behind the subject and aimed at the background, feathering the light across the surface rather than aiming it directly at the wall. When feathered, a light will evenly light a larger portion of the background. In order to keep the background light subtle, it was powered 1/3 stop less than the combined exposure of the two main lights. See **image 7.4**.

My model's hair is quite dark and still shows areas that could be considered too dark, even though the shape of her head and body are visibly separated from the background. The lighting scenario was completed by the addition of a hair light, in this case a beauty bowl with a 25 degree grid, powered 1/3 stop over the double main light. The final sample (**image 7.5**) is a very interesting mix of highlights, subdued highlights, and shadow.

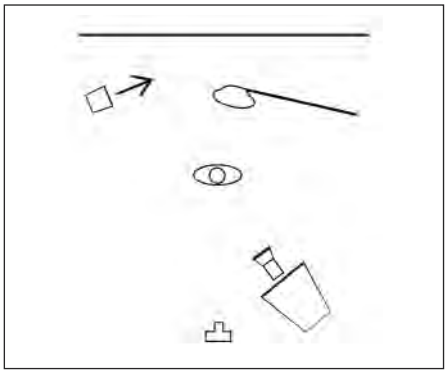
IMAGE 7.1.

IMAGE 7.2.

IMAGE 7.3.

IMAGE 7.4.

IMAGE 7.5



TOP—IMAGE 7.6.
BOTTOM—DIAGRAM 7A.

The use of the hair light presents additional options. Because of its angle and because it was positioned almost directly over the model, the light spread. Turning the model into the light spilling over her shoulder creates even more highlights and definition, without diminishing the overall effect of the double main light. See **image 7.6** and **diagram 7A**.

You're not limited to standard parabolic reflectors when creating this scenario, nor are you bound to place the light close to the softbox.

My second scenario used a beauty bowl as the brighter of the two lights. It throws light in a broader arc than a standard reflector, so it was moved into the model's space until I saw an effect I liked, about 3 feet away. The model was standing only 5 feet from the background, a position I chose because I wanted enough light to hit the background to illuminate it enough so as to not need a hair light. See **image 7.7**.

I used a large softbox, set 3 feet farther back, or about 6 feet from the subject. As you know, a large softbox placed so close to the model will produce very soft light. **Image 7.8**, lit by the softbox alone, is quite lovely.

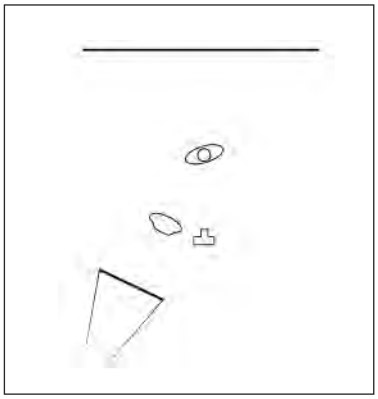
I followed the same lighting and metering regimen as in the previous example and, as before, the difference between the two lights was 2 stops. Even though the final light, at first blush, looks much like the first example with the beauty bowl, closer examination reveals softer shadows and less harsh highlights on the model's hair along with a snappier light on her face that's softer than that of the beauty bowl by itself. See **image 7.9** and **diagram 7B**.

Of course, you're not tied down to a 2-stop difference between the lights. Depending on how bright your subject's clothing is, and the ultimate effect you want to see, you could power the softbox as high as a 1-stop difference or as low as 4 stops, if you want the least detail possible while still being able to see "something" in the shadow areas that face into the light.

In chapter 9, I demonstrate a soft light technique using two large softboxes side by side. The following

IMAGE 7.7.

IMAGE 7.8.



LEFT—IMAGE 7.9.
ABOVE—DIAGRAM 7B.

technique, while similar in theory, produces an entirely different quality of light.

I set two strip lights in front of the camera, one on each side, separated by about 6 inches. My model stood about 5 feet in front of the two lights while I shot from between them. Both lights were powered equally and set vertically. I also set the height of the lights lower than usual because I wanted to see multiple catchlights that ran fully over the curve of her eyes. Shooting from between the two lights guaranteed a catchlight on each side of her pupils. See **image 7.10**.

When setting lights like this, the only problem that I can see is the creation of a double nose shadow if the subject is looking straight into the camera. As soon as she turns her head in either direction the problem is solved, and a single shadow is created from the two lights. See **image 7.11**.

Angling the two lights into an inverted V creates the same look but produces a different, angled catchlight pattern. See **image 7.12**.

RIGHT—IMAGE 7.10.
BOTTOM LEFT—IMAGE 7.11.
BOTTOM RIGHT—IMAGE 7.12.

8. TRIPLE AND QUADRUPLE MAIN LIGHTS

TRIPLE MAIN LIGHTS

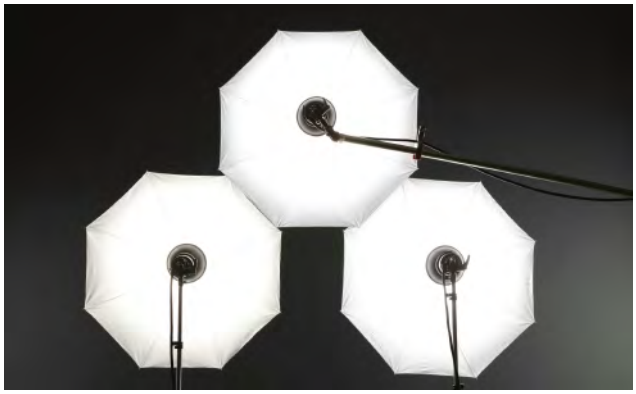
Looking for a soft light with a lot of punch? You've come to the right chapter. In a way, this technique is similar to the double main-light scenarios described in chapter 7, but the triple main light technique is different in that each light is a parabolic aimed into a 36-inch white umbrella.

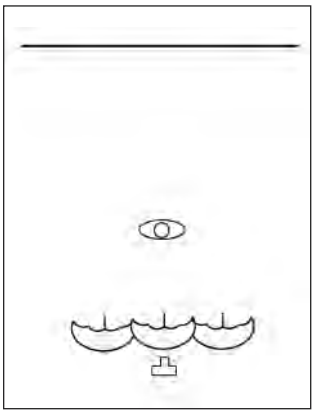
For this approach, I set the lights in a loose semicircle or with all three parallel to each other, with the center light on a boom so there is no stand to get in my way. This center light is placed higher than usual, roughly 3 feet over the subject's head. The other lights are on regular stands and placed lower than my typically recommended height, 6 to 12 inches over the subject, and can slightly overlap the center umbrella or just be butted up to it. Placement like this guarantees nice, soft shadows (but with an "edge"), and the light on the boom means I can shoot through the tunnel from whatever distance is best for the lens I'm using. All three lights are angled down slightly but aimed straight ahead, not individually angled toward the subject, and are placed about 6 feet from where my model will be. See **image 8.1**.

Metering is a little tricky but not too difficult. Set up another light stand or some sort of target where your subject will be. Measure each light separately, with the others turned off, until all three are powered equally. Turn all three lights on and measure again. You'll notice the three lights together are brighter than their individual readings because the effects of light are cumulative. If you must make an adjustment to get the total reading to a perfect whole, one-third, or two-thirds f-stop, power the two sidelights down equally or power the center light up. The adjustment will be minor, but you'll need to be as accurate as possible.

When your subject is in place, the first thing you'll notice is how nicely the subject's features are modeled by the light. You might have thought this light would be flat, but the snappy specularity the umbrellas render does exactly the opposite, and the result is beautiful. See **image 8.2**.

TOP—IMAGE 8.1. **BOTTOM**—IMAGE 8.2.





TOP LEFT—IMAGE 8.3. **TOP RIGHT**—IMAGE 8.4. **BOTTOM LEFT**—DIAGRAM 8A.

As you can imagine, the three lights create interesting catchlights in the eyes. These are easily retouched to a single point should you wish to disguise your lighting or want a more traditional look. Personally, I think retouching two of them out of each eye, disguising the technique, would be one more little thing that could set your work apart from that of your competition. ("I use one umbrella, just like you, but my shots aren't even close." Music to my ears.) See **image 8.3**.

An added benefit from this scenario is that your subject is free to move to either side without a need to reposition the lights. See **image 8.4**.

I've found the best place for the model is 5 to 8 feet from the lights. This gives each light enough distance to mix with the others and yet be separate enough to add contour. If the model is farther back, the lights tend to mix too much and flatten out a bit. It's not necessarily a bad look, it's just not as punchy. See **diagram 8A**.

Since the background will be flooded with light that's angled straight toward it, the only way you can control the brightness or darkness of the background is to vary the distance of the model to it, relative to the lights. For example, if the model is 6 feet from the background and 6 feet from you, and the background is too bright for your taste, double her distance from the background (i.e., move her 12 feet away from the background) but keep her 6 feet from you and the lights. This will reduce the light on the background by 2 stops, making it ¼ its original strength.

This technique works beautifully with a black background as well, and, while it will work with any model, it can be very dramatic if the model has dark hair. In my case, my model's hair was professionally colored to matte black and soaks up light like a black hole. I set a beauty bowl with a 25 degree grid on a boom above

her and powered it up 1 full stop over the triple main light. It was placed very close to the top of her head, about 18 inches, because I wanted fast falloff and needed to control how much light would spill onto her shoulder. If too much light were to hit the shoulder, it would blow out to pure white and be a distraction. The light was metered at the top of the model's head and allowed to fall off from there.

When you get everything set, you might want to put a piece of tape on the floor, between the model's feet, so she knows exactly where she needs to be centered. She won't have a lot of room to move around, given the narrow constraints of the hair light. See **image 8.5**.

You probably know by now that my favorite working question is, "What if . . . ?" So, what if the model were lit by softboxes in the same configuration?

I removed the umbrellas and substituted a 3x4-foot softbox for each of the sidelights, with a 2x3-foot softbox on the boom (**image 8.6**). The side boxes were angled slightly off the vertical to give me more room to shoot through them, while the softbox on the boom was set straight across. This is not carved in stone, you understand. I set the softboxes as I did for the space, but also because I thought I'd get more interesting catchlights in the model's eyes. See **image 8.7**.

TOP LEFT—IMAGE 8.5. **BOTTOM LEFT**—IMAGE 8.6.
BOTTOM RIGHT—IMAGE 8.7.

IMAGE 8.8.

IMAGE 8.9.

After checking that all three lights were outputting the same amount of power, we started to shoot. The result is spectacular light that softly wraps around the subject. It shows all the qualities that make a triple umbrella main light so wonderful, but with a little less punch. Notice how well the light illuminates the fabric of her dress. See **image 8.8**.

When a hair light is so close to the subject, there's an element of danger in the setup. While the odds are against electrocution, it is quite possible that the model may move her head in such a way as to get hit by extra light. Since the effects of light are cumulative, she will be overexposed wherever the extra light lands. See **image 8.9**.

QUAD MAIN LIGHTS

I keep trying to find new ways to wrap light around my models. When it's properly thought out and tested, light that wraps around a subject creates a different look, a look that's both even and dimensional, unlike other methods.

For this portfolio shoot I wanted something different. I knew my model would look great if I used the triple main light scenario, but I wanted to push the envelope. I wondered if the approach could be improved with an additional strobe and umbrella. I began by setting up three lights on stands arranged in a semicircle. I attached the fourth to a boom. Putting the center light on a boom allows me to shoot through the

umbrellas without having to deal with a stand right in the center of the group, but that's only a matter of convenience. One could easily shoot around the stand if necessary.

The upper three lights were powered to the same f-stop by metering each light separately. The fourth light, also metered separately, was 1⅓ stops less because I wanted it to act as fill. All four lights were then turned on and metered together to get the working f-stop.

The model was positioned about 6 feet from the lights. I've found 5 to 8 feet to be the optimum distance for a single model because the light will flatten out with more distance. **Image 8.10** is what the setup looked like from the model's perspective. Imagine the camera right in the center. The background is a Lastolite HiLite, a wonderful device I described in chapter 5.

One of the beautiful features of this scenario is the multiple catchlights in the model's eyes. Under other scenarios I'd personally not want to see more than one catchlight in each eye, but that "rule" may go out the window when the lights are placed symmetrically.

You may have noticed minimal shadowing in the shots made with the triple main light. The fourth light worked beautifully to eliminate that problem, filling what few shadows there were and adding an extra degree of dimensionality. When the model looked straight into the camera, the softness and depth of the light were spectacular. The extra catchlight is pretty cool, too. See **image 8.11**.

It didn't matter if my model moved left or right, as long as she stayed the correct distance from the light,

IMAGE 8.10.

IMAGE 8.11.

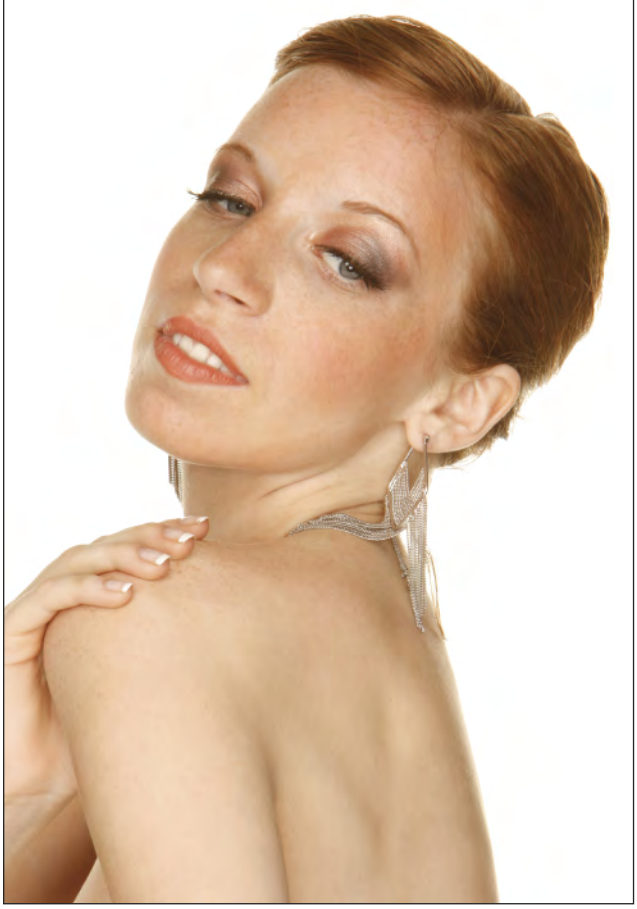


IMAGE 8.12.

IMAGE 8.13.

giving her a great deal of freedom on the set. I found it interesting that, whenever she turned her head, slight shadowing occurred on the half of her face not hit by all four lights. Beautiful. See **images 8.12** and **8.13**.

This lighting scenario has proved to be very versatile. For example, it's not necessary to always power the bottom light less than the other three. When all are equal, the result is soft, even light with a great deal of "snap." Look at the detail and color in this model's hair and the even color of her skin. See **image 8.14**.

Let's make a couple of changes. For **image 8.15**, I left the top and bottom lights evenly powered but turned the two sidelights down 1 stop each. It's necessary to re-meter, of course, because the cumulative strength of the light has changed.

Notice how she appears to be outlined, slightly, by the areas of less density on the sides of her arms yet her entire front is perfectly lit.

I'll take it a step further and turn the sidelights down an additional stop. The impression given by the lights would indicate the model's being lit with a long softbox. Notice how the extra density on her arms increases as her arms recede from the camera. Unfortunately, I'm not aware of any traditional softbox in use today that allows a camera to shoot through it. See **image 8.16**.

I left the sidelights at –2 stops and turned the bottom light down 1 full stop. The shadow under her chin has increased and the light now falls off, vertically, across her body. Even though it doesn't quite have the unique feel to it that it had in the previous images, the light is still beautiful. See **image 8.17**.

Want to drive your competitors crazy? Most photographers will look at catchlights when trying to figure out how someone was lit. If a faceted reflection is seen, it's a no-brainer that the photographer used an umbrella, so that's what they'll use to duplicate the look. Same goes for the rectangular shape of a softbox. I'd suggest that you retouch the multiple catchlights in a quad main light or triple main light shot and replace them with fake catchlights made in a shape that could never create this light, an ellipse, perhaps, or a point light source. It's so much fun to mess with the competition. See **image 8.18**.

By now you've seen some of what I would consider to be basic extensions of my train of thought, the "What if…?" scenario. You've seen what just a few combinations of lights can do if the application, the physics, and the end result are thought through before the "moment of truth" begins on the set. I'm certain that there are many combinations of lights, ratios, and modifiers that I've not covered or even thought of. I'm equally certain that you, if you've welcomed the investigative spirit that I've tried to impart, will find them. And more.

Always keep your customers amazed and your competition guessing. It helps justify your fee.

IMAGE 8.14.

IMAGE 8.15.

IMAGE 8.16.

IMAGE 8.17.

IMAGE 8.18.

9. THE SEARCH FOR SUPER-SOFT LIGHT

TURN YOUR STUDIO INTO A SOFTBOX

Softboxes are nice, as are umbrellas. Either will efficiently create large amounts of relatively soft light. But what if the source isn't large enough? What if the shadows, soft as they are, are not as soft as you'd like them?

Umbrellas and softboxes are limited in size. The largest softbox in my studio is 6x7 feet and my largest umbrella has a 7-foot diameter. Both are wonderful sources but take up a lot of real estate, especially the umbrella. Amazingly, neither produces as soft a light as I sometimes would like.

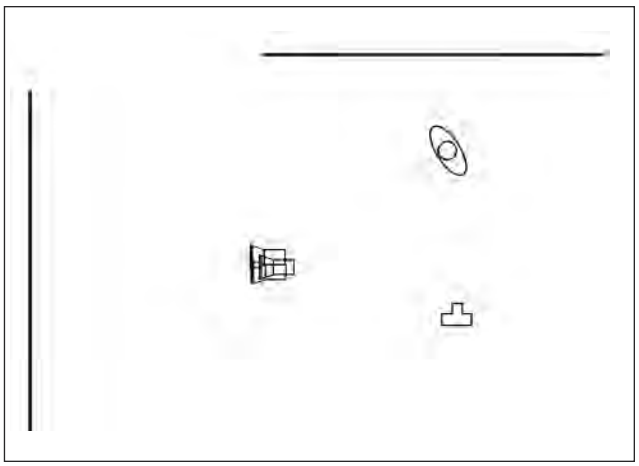
In order to solve the problem, I first looked at the size of the source. I postulated that the optimum light-to-subject distance for a softbox was the sum of its height and width, 13 feet with the 6x7-foot softbox, 14 feet with the large umbrella. While I've loved the light these gadgets produce, I've frequently wanted a look that's even softer. I've provided the following tips to help you get the softest light you can out of your studio space—without the trial and error.

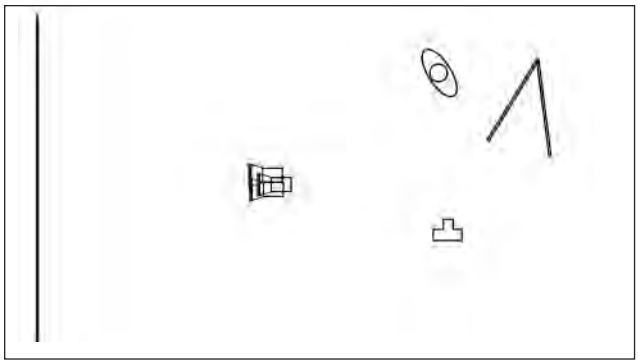
USE TWO BACKGROUNDS

This will work best if you have white walls in your studio. Off-white trim around doors or windows won't be a concern, as you'll need to do a custom white balance anyway, just to negate anything funky.

If you don't have a white wall, use a roll of white seamless paper. Set two or, preferably, three strobes on stands aimed at the top, middle, and bottom of the paper, vertically toward the middle of the sweep, from a distance of about 6 feet. Power each one to the same output. If you're in doubt about that, meter each one individually from the same spot and make adjustments as necessary.

BELOW—DIAGRAM 9A.
LEFT—IMAGE 9.1.





ABOVE—DIAGRAM 9B.
RIGHT—IMAGE 9.2.

Set up the background you'll be using for your model at least 10 feet from the white seamless (15 feet is better still). What you're doing is creating a source that's larger than any softbox or umbrella, and the result will be softer light. For example, if you're shooting into a wall that's 12x10 feet, you won't see any significant contrast unless you set the second background more than 22 feet from the white wall source.

Set the lights "ahead" of the model. In other words, if the model will be 10 feet away from the camera, set the lights at a position at least 8 feet from the camera so the light will wrap around the model a little as it bounces back from the white wall or seamless. Remember, none of the three lights are aimed at the model. See **diagram 9A**.

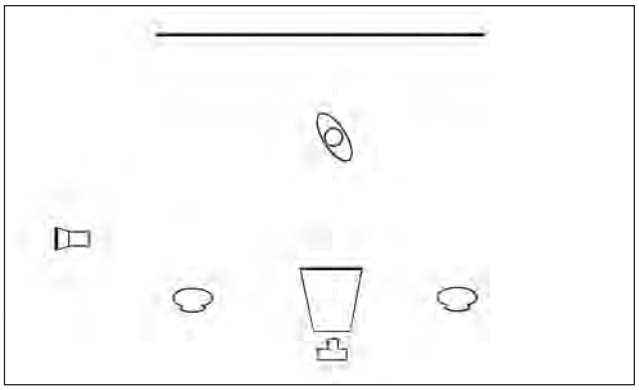
Meter this as you would for a profile, with the dome of the meter placed under the model's chin and aimed at the light. Be sure all three lights are equally powered.

Your first images will show delightfully soft light across your model's face, with shadow coming in from the unlit side. See **image 9.1**.

Now, to open up the shadow side, bring in a bookend or other fill card to bounce light back into the shadows. Because the source lights are so far away, the depth of light is such that the strength of the bounce is not too much less than the light from the main light—there is more than enough to provide contour and depth. Open the bookend or use a large reflector to push as much light as possible across the model. See **diagram 9B** and **image 9.2**.

I decided I'd build on the concept of using a room as a light source by creating an even softer source, placing existing lights in new positions and adding more if necessary.

I moved all but the highest light off the white sweep, placing the remaining two lights on stands approximately 8 feet to each side of the camera, aimed at the white ceiling but at an angle that would direct the bounce light to the model. All three lights were metered separately and powered to the same f-stop, then metered again to the cumulative aperture value. I added another light, fitted with a medium softbox, directly above the camera and aimed at the model. This light was powered to –1 stop below the rest of the lights (metered with the other lights turned off, of course) to add fill without overpowering the softness created by



ABOVE—DIAGRAM 9C.
LEFT—IMAGE 9.3.
BOTTOM—IMAGE 9.4.

the others. The scene was re-metered one last time, with all the lights firing, to get the working aperture for the camera. See **diagram 9C**.

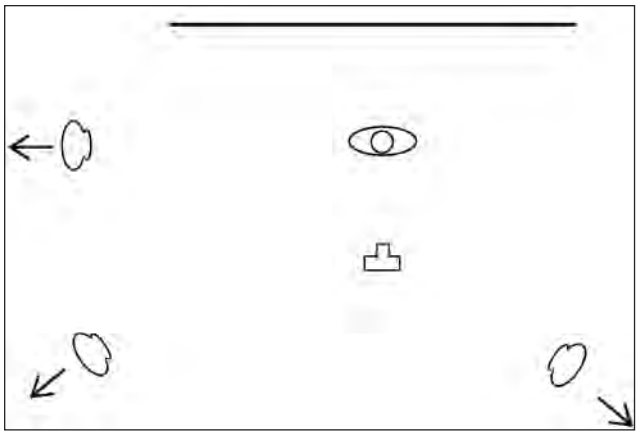
The light I'd left shooting into the white background added just a little more contouring to the side of my model's face and figure, but the overall light was beautifully soft and rich. The light from the softbox filled in any dark shadows under the eyes. The other lights, while not flat, generated light that was still very soft. See **image 9.3**.

In the interest of simplicity, I turned off the light beaming into the white sweep on the left. While the slight contouring from that light was a welcome addition to the overall scenario, I found the results without it to be very satisfactory. The final scenario of one softbox aimed at the model and two lights with reflectors aimed at the ceiling was both simple and soft, exactly what I'd hoped to accomplish. See **image 9.4**.

THE STUDIO AS SOFTBOX

I like to make use of every square inch of my studio space for placing backgrounds and lights (except for the refrigerator area, where the beer is stored).

This next setup used one wall and two corners of the studio to create a very large source using regular parabolic reflectors. My first light was aimed up and into the wall approximately 15 feet to the left of camera and about 5 feet from the wall itself. The second was aimed into the corner of the room behind my left shoulder. That light was also pointed upward so the bounce would travel up the walls and bounce back from the



TOP—DIAGRAM 9D.
BOTTOM—IMAGE 9.5.

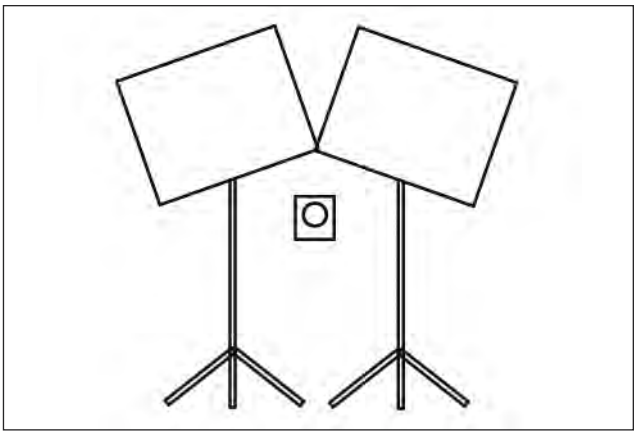
ceiling toward my model. Both of these lights were powered to the same output, measured at the subject.

A third light was aimed into the corner of the room behind my right shoulder. This light was powered 1 stop less than the combined power of the other two (metered with the other lights turned off), to provide some very soft contouring on the model's face. See diagram 9D. Obviously, a custom white balance is essential in situations like this. See **image 9.5**.

For those of you with small studios, turning the walls into sources of light is an easy and very inexpensive way to get "big" light. An added benefit is that the depth of light increases because of the extra distance between the lights, the walls, and the subject.

USING MULTIPLE SOFTBOXES

Should you own two equally sized softboxes, especially large ones, here's a great way to build a contoured, super-soft light that looks like a million bucks.



TOP—DIAGRAM 9E.
BOTTOM—IMAGE 9.6.

I placed my two large softboxes directly in front of the lens and one to each side of it, horizontally, with a slight upward angle at their centers so I'd have a little extra room to move the camera up or down. The model was separated from the boxes by less than 4 feet, so the two sources would be very large and very soft. The soft-

IMAGE 9.7.

box at camera right was powered to 1 stop less than the other. See **diagram 9E**.

The black background was nothing more than a 4x8-foot sheet of black foamcore. I'd begun the shoot with my model about 6 feet from the background, but the light from the two softboxes did not fall off fast enough and the background was a medium shade of gray. I moved the model, the lights, and the camera 3 feet farther from the background, which meant that the light would lose strength faster over the extra distance, producing a deep, dark, charcoal-gray background. This is a relatively simple two-light shot, without hair or background lights, yet the image has great depth and character. This is perfect light for model or actor headshots, as they do not usually require kickers. See **image 9.6**.

ONE SOFTBOX, ONE SHEET

I've written in other books about how small (accessory) flash units can be made to perform like larger, studio units by adding extra diffusion. I've also written about how to use small softboxes, beamed into a larger diffusion panel, to create even softer light.

What if that's not enough? An additional layer of diffusion will benefit any situation where softer light is desired. For this set, I mounted a large softbox and set it far enough behind a queen-sized white bedsheet to allow the light to hit most of the sheet without spilling over. I'd clamped the sheet to a boom arm, but there are a number of other ways to mount such a large piece of cloth, the easiest of which is to simply stretch it between two light stands, ensuring that it is taut enough to eliminate any wrinkles or folds that could create an area of negative density within the image.

This is a very simple trick, and the light looks beautiful. You might want to try any of these tricks when dealing with a more mature model, as the light is substantially softer than that produced by any one softbox and will soften age lines somewhat. See **image 9.7**.

SOFT LIGHT THAT FALLS OFF

Here's another nifty little trick that will produce very soft light that falls off noticeably as it travels down a subject's body. A caveat: it will only work with a white or neutral-colored ceiling.

Mount a medium or large softbox on a stand and aim it at the ceiling (I used a medium softbox). Leave just enough of the lower edge in view of the subject so that a little of the light will actually fall on her. Knowing

IMAGE 9.8.

where that light ends, the point at which the edge of the frame blocks the white diffusion front, will tell you where the light will fall off.

Aim the softbox at the ceiling from a distance that allows a full bounce down to the subject and creates nice shadows. Meter as usual, under the chin, reading both the bounced light as well as the little bit of oblique light coming from the angled box. The bounced light below the oblique light will be less strong and will fall off at that point. As with any trick that involves light bounced off a surface, a custom white balance is a necessity. I know this looks odd (it is), but it produces a terrific soft light that's also quite unusual because of the vignette. See **image 9.8**.

This first image was made with the model about 4 feet from the edge of the softbox and about 10 feet from the background. Notice how soft the light is on her face, due to the large surface area of the ceiling and the slightly more defined light from the edge of the softbox. A hair light, a beauty bowl with a 25 degree grid (a favorite combination), was set on a boom arm directly over the model's head. It was powered to the same f-stop as the main light, providing just enough kick to give the model extra dimension. See **image 9.9**.

We created a nice variation with this lighting when the model held a translucent umbrella and the hair light was boosted an additional ⅓ stop. The halo from the umbrella, along with the angle of its handle and the model's arms, combined with the light's falloff to direct all attention to her beautiful face. See **image 9.10.**

If you like this as a general idea but prefer less falloff, simply increase the distance between the model and the light (it was approximately double for **image 9.11**). The softbox will spread the light more evenly. You'll also see an increase in the brightness level of the background, as the Inverse Square Law comes into play and the light on the background is closer in value to that of the model.

IMAGE 9.9.

IMAGE 9.10.

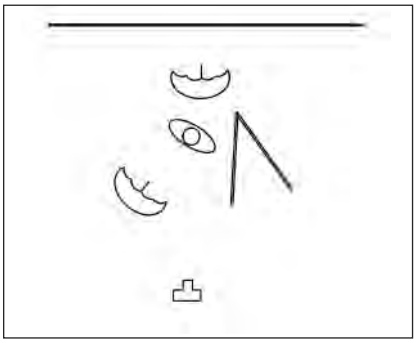
IMAGE 9.11.

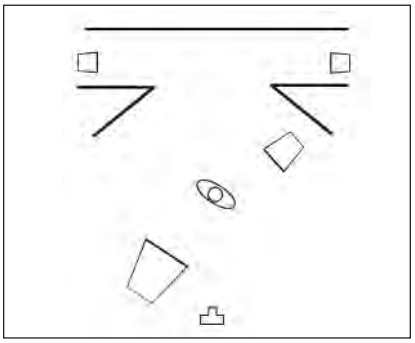
10. HIGH KEY

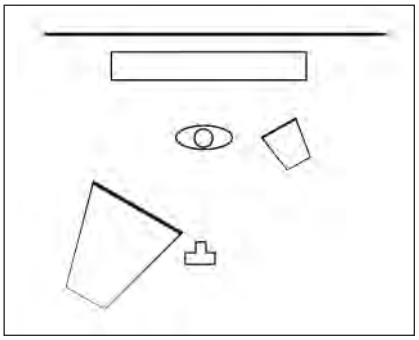
I've written many times about high key lighting techniques and how to achieve them. The term "high key" is a bit misleading. As I've often said, high key has nothing to do with overexposure of the subject (though a photographer can opt to take that approach if it suits the subject); it merely means the vast majority of tones are above middle gray and that the background is almost always white but may show some detail.

The nice thing about high key is that there are many ways to create it; I continue to find new tricks and variations on scenarios I've previously written about. Some are impressively simple; others are more complicated. As always, I'll leave it to you to experiment with them and decide what will work best for you and your studio. I wish it were practical to include each and every technique in this book, but I'd be critiqued for repeating myself (and there isn't enough room in this book, anyway). In a heartless bit of shameless promotion, I must advise you to buy all my other lighting books, now and in the future, to learn every trick.

My first scenario falls into the "simple" category and is really easy to set up, using two lights with umbrellas.







TOP—IMAGE 10.1. **ABOVE**—DIAGRAM 10A.

TOP—IMAGE 10.2. **ABOVE**—DIAGRAM 10B.

TOP—IMAGE 10.3. **ABOVE**—DIAGRAM 10C.

The first light, the main light, is set on a stand in front of and to the side of the subject. The second light is set slightly behind the subject and aimed at the background. It's best, in my opinion, to mount it on a boom so it can be centered over the subject's head, but it will work nicely if mounted on a floor stand and feathered over the background. If you want a completely white background, the exposure behind the model's head should be at least ⅔ stop brighter than the main light. My sample set the exposure value of the background light to be equal to that of the main light, and the result is a pure-white background behind her head that gradually falls off to light gray toward the bottom of the image.

I also set a white bookend at camera right and quite close to the model to open the shadows on her unlit side. See **image 10.1** and **diagram 10A**.

I liked the look produced by the bookend fill card, but I wanted something with a bit more snap. I also wanted to get more contour to her face.

I set up two strip lights—one on each side of the background—and aimed them to the center. The lights were carefully positioned so there was no more than 1/10-stop difference over the 5 feet of important background behind the subject. The exposure value of the background lights, measured together, was equal to that of the main light. Setting the lights in this manner means the white paper background will have some detail (though slight) throughout.

Both strip lights were blocked by a black bookend to keep any spill light off the model and the camera's lens.

The umbrella at camera left was swapped out with a medium softbox placed in approximately the same position. The white bookend at camera right was removed and replaced with a small softbox that was moved a bit farther back toward the background but aimed at my model's side. This softbox was powered to be equal to the main light. See **diagram 10B**.

With all lights powered equally, I ended up with a series of images with a definite high key feel but with detail everywhere. Although I didn't try it, I think this scenario would work equally well using umbrellas for the two subject lights. Larger, "normal" softboxes would work in place of the strip lights but would require more room. See **image 10.2**.

I thought it might be interesting to see a graded background, from the top down, so I turned off one of the strip lights and mounted the other on a boom, centered over the subject but far enough behind her that the light would not impact her look. I also replaced the medium softbox with a large softbox that was set at the same position to produce a broader, softer light. There is some spread of light from any modifier, of course, so I made sure the model was positioned far enough from the background so the light that fell on her from the strip light was equal to that of the main light. It took a few minor adjustments in her position, but the extra minute or two was worth it. Notice how the light from above defines her shoulders without being overly bright. It was metered to be equal to the main light at that point. See **diagram 10C**.

Look at the diagram and you'll see that I also turned the small softbox toward the background. Because of its distance from the paper, it doesn't add much more than a little extra gradation from the right to the left side. I powered it so the little bit of light that splashed to her side was equal to the main light. Because the effects of light are cumulative, it appears there is a highlight along her camera-right arm. Smoke and mirrors. And physics. See **image 10.3**.

The most important tool in your arsenal, especially for high key photography, is a light meter that's calibrated to your equipment (using a meter straight out of the box is sometimes a mistake). No doubt you noticed that my model was wearing white clothing against a white background but there was detail wherever it was important. That would have been difficult to pull off if I had to guess at the exposure or use my camera's LCD as a light meter (both are poor decisions). If you don't know how to calibrate your meter, look at my blog (www.chrisgreylighting.com), where the process is described quickly and simply. The key to creating high key imagery, any imagery, is confident control over the lighting. If you know your meter is right on the money, you can set and power your lights exactly how you want them. Your camera will then do its job correctly.

LEFT—IMAGE 10.4.
ABOVE—IMAGE 10.5.

Another approach is to use a large softbox (at least 3x4 feet, but bigger is better) as a background. Meter it by retracting the dome of the incident meter and pressing it flat against the fabric. The reading you will get will equal what's needed for a perfect shot of a white surface. In other words, if you use that reading you will see detail in the fabric of the softbox, something you probably don't want. Make note of the reading; it will become important when you set the main light.

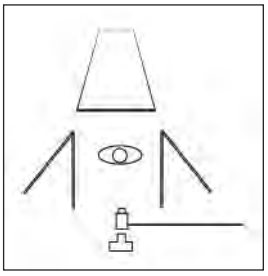
I set my large softbox on the floor. I would normally set it on a stand, but I wanted the posture that my model would give me if she were on her knees. When kneeling, the transfer of physical power from the legs through the torso and shoulders is subtle but different enough to use to one's advantage.

My main light was a basic 36-inch umbrella, set directly over the lens. I powered the umbrella's light to be 1 stop less than the reading I made from the front of the large softbox. This lesser reading would be the working aperture on the camera. In other words, the background light would overexpose itself by 1 stop, becoming completely white. Also, the full-stop overexposure would negate any shadow thrown by the umbrella while allowing some light to wrap itself around the model. **Image 10.4** presents a practical overview of the lighting scenario, a very simple setup.

When you crop in to the image, the beauty of this setup becomes evident. Facial features are nicely defined, while the background is pure white. There is detail in almost every part of her clothing, even those areas that intrude into the pure-white background. Working with calibrated equipment is essential to pulling off tightly controlled shots such as this. See **image 10.5.**

A REALLY COOL VARIATION ON THE BASIC SETUP

Set two white bookends on each side of the large softbox, angled parallel to the subject. Set a bare-tubed strobe on a boom, with the tube directly over the camera, powered to 1 stop below that of the softbox. You'll still get the wraparound effect of light from the softbox, while the two bookends will soften the effect of the bare-tubed strobe. See **diagram 10D**.



ABOVE—DIAGRAM 10D.
LEFT—IMAGE 10.6.

IMAGE 10.7.

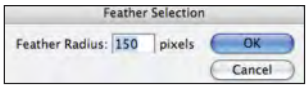


IMAGE 10.8.

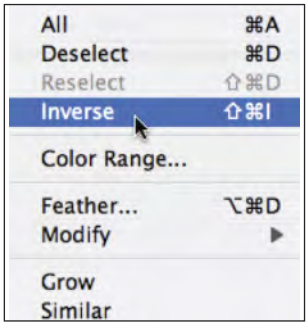


IMAGE 10.9.

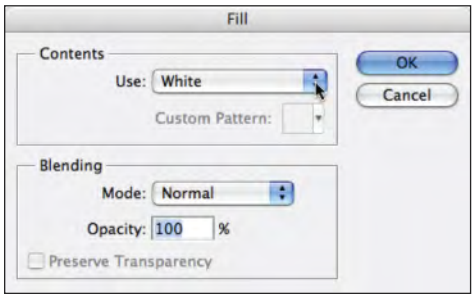


IMAGE 10.10.

You'll notice immediately, if you've measured the light with a calibrated meter, that the model's white dress is perfectly represented, with detail in all areas except those affected by wraparound light. This is beautiful, simple, beauty light. It's high key, but with important detail throughout.

Here's an easy way to vignette a high key image to a white border, a very effective way to enhance the high key effect. Begin with your favorite image. **Image 10.6** was made with a medium softbox in front of a larger softbox, powered 1 full stop less than the big box.

In Photoshop, use the Lasso tool to create a freehand shape around the subject. The intent is to make everything outside the line feather to white. Personally, I think this works better if the shape is a more irregular, organic shape than a basic oval or circle. See **image** 10.7.

Once you've drawn the shape, go to Select>Modify>Feather and set the pixel amount to soften the edge. Larger files require a larger pixel spread for a soft boundary; play with your files to determine what you like. This file (**image 10.8**) was rather large, about 45MB when opened, so I feathered by 150 pixels.

Next, go to Select>Inverse. This means you will affect the area outside the line, rather than the interior of the selection. See **image 10.9**.

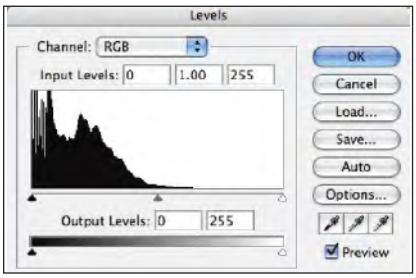
Fill the selection with white. If you have other colors in the Foreground/Background palette, choose White from the menu. Check to be sure the Blending Mode is Normal and Opacity is at 100%. See **image 10.10**.

You'll probably have to go back and re-draw the Lasso pattern a few times before you get the perfect effect. It takes only a minute or two to get through the procedure, and the result will add a great deal of visual interest to your final image, making it look even more high key than how it was shot. I think it's an easy jump to see how effectively this trick would work on other forms of portraiture, such as seniors or bridal portraits. See **image 10.11**.

IMAGE 10.11.

11. LOW KEY AND THE ISOLATION OF YOUR SUBJECT

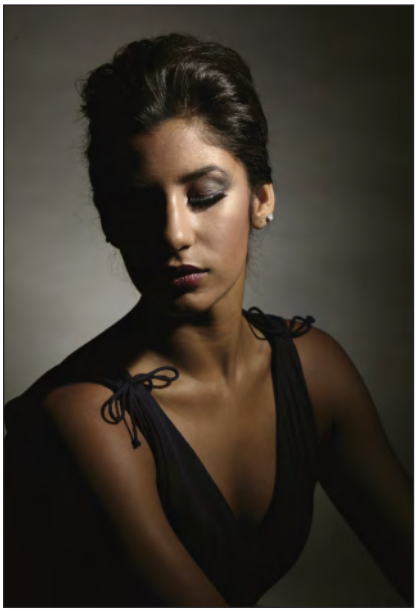
Low key photography doesn't depend on underexposure to make its point; the key to low key is that the majority of tones, even correctly exposed tones, fall below middle gray. This can be verified by looking at the histogram for a low key image. My first sample, **image 11.2**, produced the histogram in **image 11.1**.

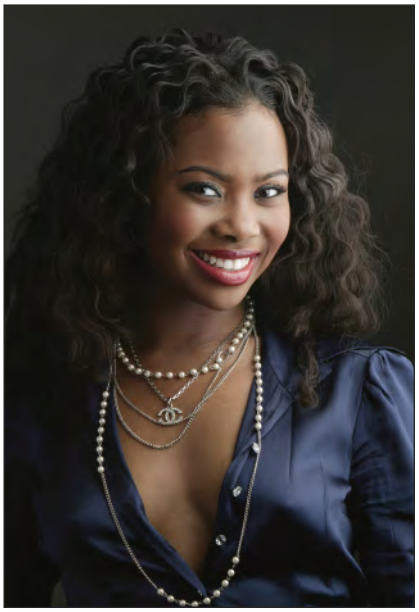


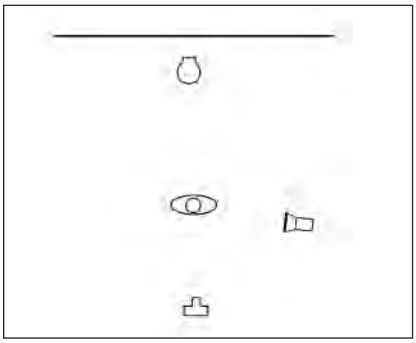
LEFT—IMAGE 11.1.

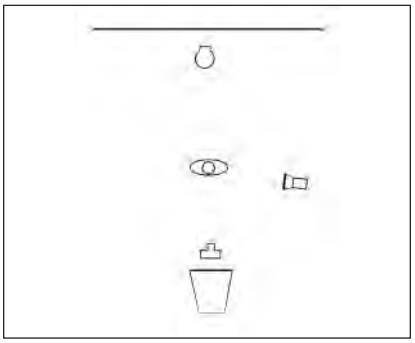
This example uses only two lights. The main was a parabolic with a 20 degree gridspot, aimed at my model from the side. My intention was to light only half of the model's face, letting the rest quickly fall into deep shadow. A side benefit of using small gridspots is that they produce their own vignette, falling off quickly at the edges and producing light that is very circular.

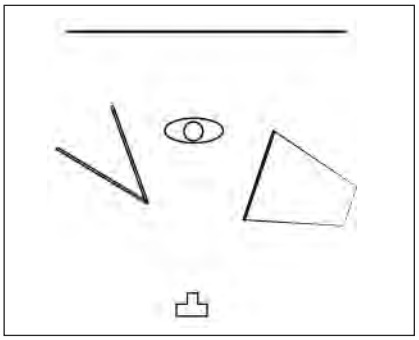
To keep her dark facial shadows from blending into a dark background, I used a background light with an











TOP—IMAGE 11.2. **ABOVE**—DIAGRAM 11A.

TOP—IMAGE 11.3. **ABOVE**—DIAGRAM 11B.

TOP—IMAGE 11.4. **ABOVE**—DIAGRAM 11C.

aluminum floor register box resting in a parabolic reflector (one of the cheap tricks I wrote about in *Christopher Grey's Advanced Lighting Techniques*). The strobe was powered ⅔ stop less than the main light and measured at the paper just behind her head, so the brightest part of the light would be less than "perfect" and fall away quickly. It's not necessary to power each light equal to, or greater than, the main light. Digital photography is touchy, but it will react favorably to underexposure, creating delicate areas of highlighted, yet saturated color. See **diagram 11A**.

The second example with this scenario uses just a little bit of fill light to add detail to the shadow side. I set a medium softbox over but behind the camera and powered it down to 3 stops less than the main. (Three stops is about the limit that digital can capture with a degree of clarity.) Even at such a low power, the fill light puts detail into the shadow areas of her dark dress and face without detracting from the look of the lighting. See **image 11.3** and **diagram 11B**.

Low key imagery is also possible with only one light. The trick is to add just enough fill to light the unlit side.

My example (**image 11.4**), with the one light and only one bookend, takes advantage of light falloff by setting the main light close to the model (so the highlight-to-shadow distance is short). I placed the main light, a large softbox, about 2 feet from her so the highlights would be bright, but I also set the bookend close (about 2 feet from her) to maximize its reflective qualities. This allowed me to get a bright edge and richly colored shadows. I'm not sure you'll be able to see it on this small sample, but the bookend fill adds color and contour to her eyes.

I placed my model about 5 feet from the background, a medium gray paper sweep. She was positioned close because I needed the main light to be strong enough to register with some degree of gradation and, to make it more evident, I angled the softbox so the light was aimed at the camera-left side of the background, more into the bookend. The slight gradation across the gray field gives the image more depth and a feeling that the background itself is angled away from camera. See **diagram 11C**.

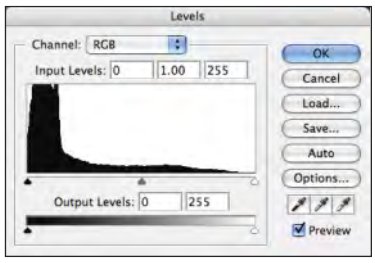
Another way to use the low key look would be to isolate part of the subject or group and let the rest of the scene fall off. For this image of three sisters, I used a beauty bowl with a 25 degree grid with a piece of thin, white cloth stretched over it. The cloth diffused the light while spreading it beyond its typical boundaries. The result is a soft spot of light in the center that falls off, still illuminating detail, to points beyond.

I knew that the subjects' dark hair would merge with the background, so I hung a strip light from a boom above them and allowed a little of its spill to fall onto the black paper. The hair light was powered ⅓ stop less than the main light as measured at the shoulder. The slightly stronger light at the top of their heads was about equal to the output of the main light, creating visual interest, while the light falling on their shoulders and below became a simple accent. See **image 11.5**.

The histogram shows this image to be perfectly exposed with the majority of tones below middle gray. It is a perfect example of low key lighting. See **image 11.6.**

You can use the concept of lighting to isolate for other images as well. If you photograph couples for engagement photos, you may wish to extend the shoot from the usual newspaper announcement or standard portrait style and spend a little extra time exploring the romantic aspect of your client's relationship.

Think about it: They may never be more deeply in love. You've probably had them hugging each other



BELOW—IMAGE 11.5.
RIGHT—IMAGE 11.6.

already, although they were focusing their attention on the camera. Now, you'll want them to focus on each other.

When booking the session, I'll ask couples to bring a selection of clothing. I usually like to see what they consider "ideal" for their portrait as well as more formal or casual attire. I may ask the woman to bring a tube top or something that will bare her shoulders, and I will explain that, "I have an idea I'd like to try when we're done with the portrait." It's only fair to say that, at this point, I don't really have a clue as to which direction I'll go, only that I'll assess the clients when they arrive and build a lighting scenario to fit them, their mood, and their wardrobe.

The next two images (**11.7** and **11.8**) are from such a shoot, although the concept of a formal engagement portrait never came up. The couple wanted to bypass the traditional and go straight to the romantic, and I was happy to oblige.

My first setup used the beauty bowl and diffuser combo. I'd posed the couple loosely, then put the light on a boom and swung it over the them. As they were posed in an embrace, I knew it would be relatively easy to get them to forget about me, that they would start to cuddle before I was ready (and I'll freely admit I took extra time to get there, to give them more time with each other).

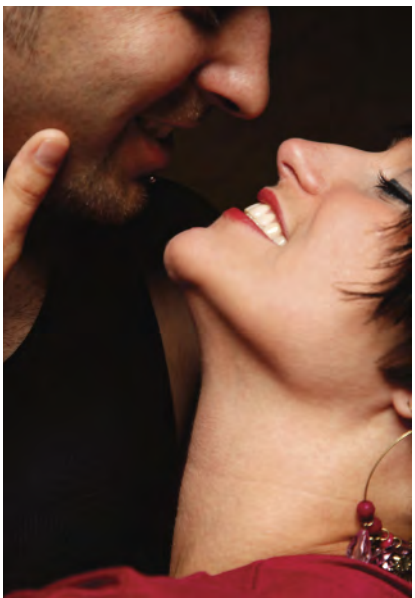
I set the light rather low and aimed at the woman, as I wanted it to skim the man and more perfectly illuminate the woman, something a diffused beauty bowl will do when carefully positioned. I also had placed the two of them within 3 feet of the background, as I wanted just a bit of spill on the cloth sheet I'd previously hung. When I was ready to go, they were, too. It took only a few frames and minimal direction to get this beautiful image (**image 11.7**).

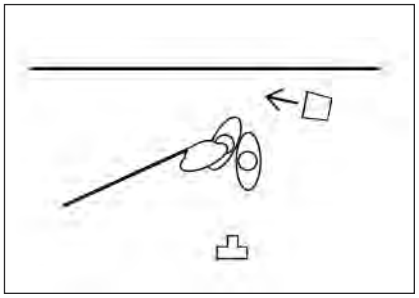
I sent the woman into the dressing room to change into a strapless top. While she was gone, I set up another light, a strip light, at camera right. My intention was to keep the skimmed beauty bowl light scenario while adding a strong (+⅓ stop) accent to the man's face. I planned to crop more loosely this time, but I wanted to have the images composed tightly enough to avoid a highlight on the side of her head, something I felt would be a distraction. I also feathered the light a bit, aiming it more at the background than at him, because I wanted a little more definition on the cloth behind him. The light on the man was powered to ⅓ stop over the light on the woman. See **diagram 11D**.

The result (**image 11.8**) is an image that's both strong and tender. The two lights individually accent two distinct personalities, but the composition clearly shows them as a couple.

I've spent a fair amount of time in this chapter explaining how to avoid tonal merger. Personally, I think it should be avoided most of the time but, like every "rule" of photography, it can be used as an attention-getting element when properly implemented.

I wanted a soft but contrasty light source for this next image, so I set an extra-small (14x20-inch) softbox about 3 feet from my model. By my calculations, the sum of the length and width of a softbox will indicate its optimum working distance, where it will produce a soft light with a minimum of specularity. I put a black bookend behind the model to soak up any stray bounce. There was no light falling on the black background. The net effect is an image that's compelling, mysterious, and sensual. See **image 11.9**.



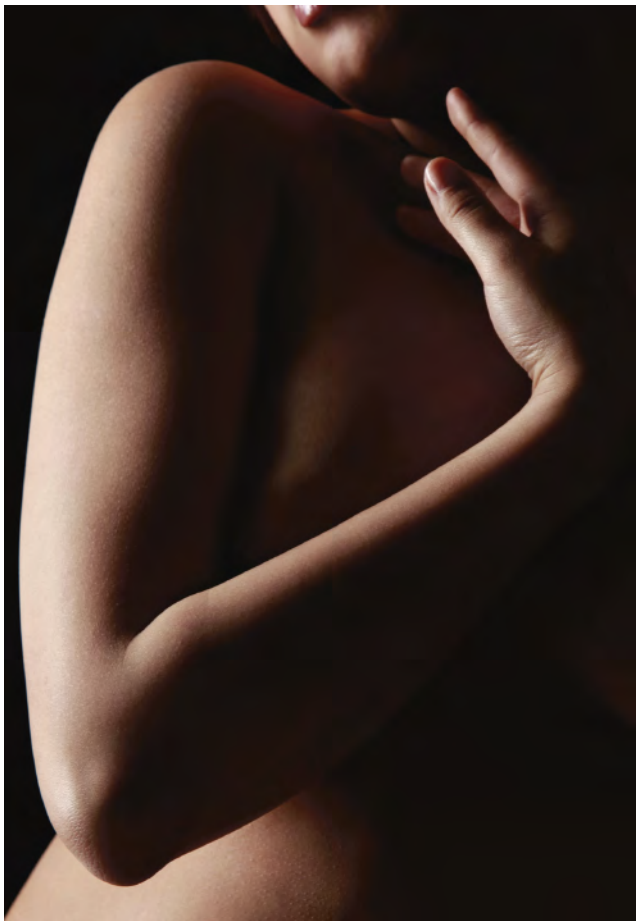


FAR LEFT—IMAGE 11.7.
LEFT—IMAGE 11.8.
ABOVE—DIAGRAM 11D.

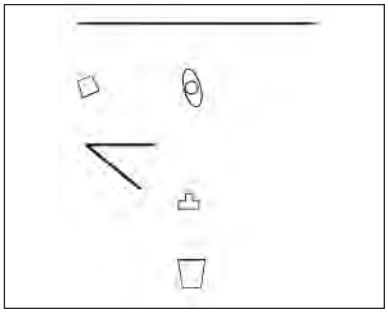
You can use this same simple scenario to create equally sensuous images of body lines. This is one time when lack of shadow detail works in your favor. See **image 11.10**.

Softer light, with less contrast, works great and looks great in a low key situation when it's controlled to the *n*th degree. I wanted a soft rim of light on my model, but simply aiming the light toward her face sprayed too much light on the background. I used a strip light but turned it away from the model, aiming it into a black bookend, to get just the edge of the light on her with only a hint of spray onto the background. The bookend also served as a gobo, keeping the light from flaring into the lens. A second softbox was set behind me and aimed at the ceiling. It was powered 2 stops below the main light, as measured at her shoulder—just enough to give me some shadow detail and avoid tonal merger. See **image 11.11**.

BELOW—IMAGE 11.9. **BOTTOM**—IMAGE 11.10.



ABOVE—IMAGE 11.11.
RIGHT—DIAGRAM 11E.



Since I wanted the least influence possible from the main light on her face, I aimed the meter's dome at the light. This ensured that I'd only be metering the specular highlight, the brightest part of the scene, not getting a reading of the average of the highlight-to-shadow ratio. This is one of the very few times when you can use the light meter in this manner to creatively skew the exposure. See **diagram 11E**.

12. OVEREXPOSURE AS A CREATIVE TOOL

As a creative tool, overexposure is quite underrated. What I'm about to propose is a deliberate and well thought out method for producing images that are extremely compelling but unattainable by other methods. It's an amalgam of pre-visualization and Photoshop, and the results are fantastic.

One problem you'll see with dramatic lighting and proper exposure control is that shadows and tonal merger can be issues. Many dramatic beauty and glamour images are made against dark backgrounds, and for good reason: the drama of the scene demands it. By itself, **image 12.1** is a nice photo. The image was made using only two lights with beauty bowls, one as the main light and the other as a hair light (powered ⅓ stop below the main light, to keep its effect minimal). See **diagram 12A**.

What if we could deliberately move beyond that constraint to create images that transcend the boundary? Well, it is possible to create a great image that has white values of more than 245 (as seen in a histogram), even though conventional wisdom tells us that we will not have detail in the highlights beyond this point. Let me show you how.

We can seriously jazz up the effect of the image by ramping up the light, essentially overexposing parts of it. Now, this is not a trick you want to jump into. You really should spend some time playing with it and bending it to your own will. Only then will you understand how you might add this trick to your repertoire.

ISO numbers work the same as shutter speed and aperture numbers. Doubling the speed from 100 to 200 doubles the sensitivity of the sensor, and halving the speed from 100 to 50 cuts the sensitivity of the sensor by half. Similarly, opening the aperture from f/8 to f/5.6 doubles the amount of light striking the sensor while stopping down from f/8 to f/11 will cut the amount of light reaching the sensor in half. The same principle holds true for shutter speeds. The three functions, working together, create an effect called "reciprocity," which can be used to your advantage.

Rather than re-powering the two strobes for **image 12.2**, I simply upped the ISO of the camera from 200

ABOVE—IMAGE 12.1.
RIGHT—DIAGRAM 12A.

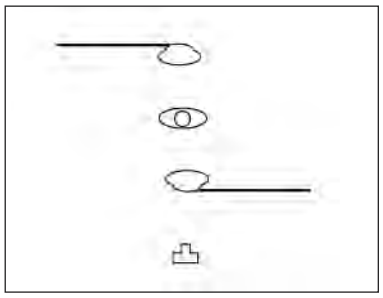


IMAGE 12.2.

IMAGE 12.3.

IMAGE 12.4.

IMAGE 12.5.

IMAGE 12.6.

(the ISO used in the first shot) to 400—a 1-stop increase in the strength of the light as the sensor would see it. When you look at this image, you'll see immediately that some of the highlights are blown out to pure white. This is just fine. As it is, it's a visually interesting and provocative image, simply done. Of course, your client won't know how easy it was to create it, and you can charge more for the "special" image.

Increasing the working ISO another half stop, to ISO 640, presents images that are unusable, at least as they were shot. It's not so much that the highlights are too bright but rather that the midtones are so bright as to be objectionable if printed as they are. See **image 12.3**.

Here's where Photoshop comes into play. Simply open the image, duplicate the layer, and select Multiply from the blending modes. Multiply will approximately double the density of any pixel it can wrap itself around. With images that contain blown-out highlights (areas of no detail) Photoshop is unable to add density because there's nothing there at all. The result is a darker image (where it counts) containing areas with zero detail. It's a stunning effect that may be regulated by moving the Opacity slider until you get an effect you like (I set the opacity to 25%, reducing the Multiply layer to 75% of its original density). See **image 12.4**.

Let's kick the ISO up another half stop, to ISO 800. In my opinion, 2 stops is about as far as most images

IMAGE 12.7.

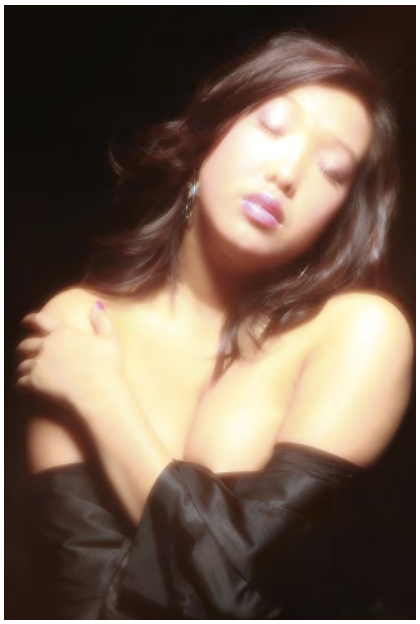


IMAGE 12.8.

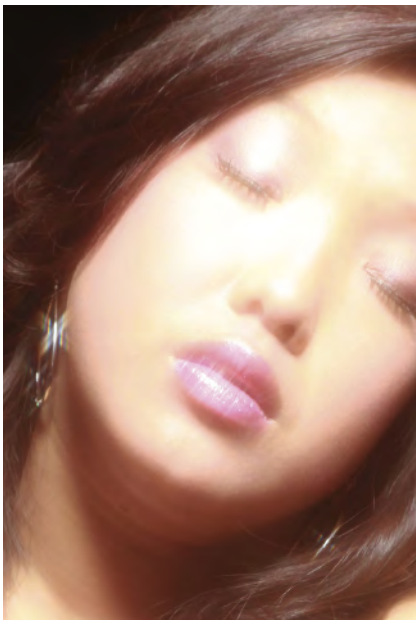


IMAGE 12.9.

can be pushed with this technique. (I'd encourage you to try this yourself, of course. You may find a trick I've not even thought of to get something even better than what I'm writing about.) I think this is about the limit because too many details, the important details such as the slight shadows that define contour, become so bright that they begin to disappear. Without contouring, the overall image is visually flattened. Also, as you can see, some color gets washed out to the point where it changes its own appearance. See **image 12.5**.

For this image, I used the technique just described, this time setting the opacity at 100% to add as much density as possible. You may wish to duplicate the multiply layer yet again for your images, as the extra density of a third layer may help. It's your call. See **image 12.6**.

These "adjusted" images make great black & white or toned images, even at +2 stops. In fact, the heightened effect of the conversion only adds to the built-in surrealism of a toned monochrome print.

After conversion to monochrome in Photoshop's Channel Mixer (Red 40, Blue 30, Green 20) I used one hit each (at the default strength) of red and yellow in Image>Adjusments>Variations to get this beautiful sepia tone. I added an additional multiply layer, setting its opacity to 30%, for a little more contrast. See **image 12.7**.

In *Christopher Grey's Advanced Lighting Techniques* I wrote about using pieces of thin cloth as soft focus filters. This is a beautiful technique that can add intrigue to an ordinary image but can work magic on an image that's deliberately overexposed.

My demo shot was lit with only one beauty bowl and grid. I'd placed a piece of peach glitter organza, cut to size and placed between a clear UV filter and a retaining ring, and attached it to the lens. I knew that using only one light would allow some of the dark tones and shadows to merge into the black background, but I felt the effect of the fabric would make the image interesting enough that the detail wouldn't be missed but would actually add to the mystery. This image (**image 12.8**) was made at 1 stop over the meter reading.

The weave of the fabric acts a bit like a fiber optic in that a thread will reflect and carry light from the thread next to it, with the light diminishing in intensity the farther the thread is from the reflected light. Because the threads are woven at right angles, it can also create a star effect out of specular highlights (the effect is similar to, but not as sharp as that produced by diffraction grating filters). The angle of the star can be varied by rotating the filter, as the effect will follow the weave. I chose the peach fabric because it warmed the image slightly, changing a little of the color. See **image 12.9**.

13. UNDERLIGHTING

Underlighting, in which fill or accent light comes from below the subject, is not a widely used technique in traditional portraiture, although it does have its place. For beauty and glamour work, there are many instances when underlight's extra zip will be a welcome addition to your images.

UNDERLIGHT AS ACCENT

There's one significant problem with underlighting: because the light needs to be brighter than the key, you have to pay attention to how it affects the underside of your client's throat, nose, and eye sockets. Further, underlight can throw a shadow up from your subject's upper lip. You'll have to look carefully and tweak the position of the light(s) or the pose of the subject to minimize these problems. Note that none of these problems are deal breakers. Upwardly directed light can be sexy and sultry just because it's different and unexpected; you'll just need to change the problems this light presents into assets that benefit your vision.

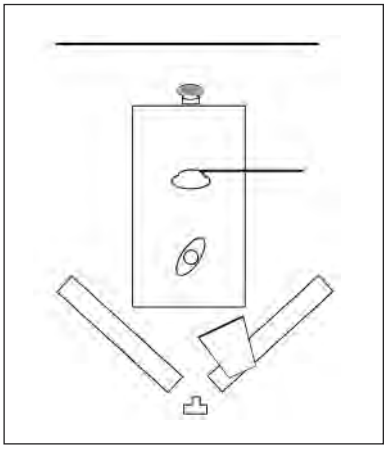
Just putting a light on the floor may not allow for enough light-to-subject distance to get the desired depth of light. In other words, the subject needs to be positioned so as to avoid rapid falloff of the light.

For my first set, I began by building a "stage" out of a sheet of 4x8-foot plywood that had been placed on three metal sawhorses, 30 inches above the floor. This is where the model would stand.

In front of the stage and on the floor, I set two strip lights in a wide V pattern, propping them up on sandbags to aim the light properly, about 2 feet from the left and right corners. A medium softbox was placed at camera right, over the strip light on the floor, and aimed at where the model would be standing. Additional lights included a beauty bowl with a grid and a strobe with a 20 degree grid set under the stage and aimed at the canvas background. See diagram 13A.

The two strip lights were powered to ⅓ stop over the key, as was the background light. The strength of each of the strip lights was metered at the model's shoulders, allowing the light below the meter-mark to be brighter. The background light was metered at the hot spot.

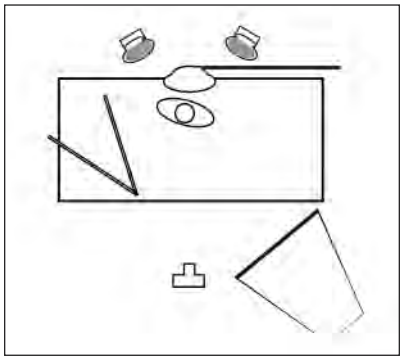
This was a complicated setup, but the result (**image 13.1**) was worth the effort. The light contoured the



BELOW—IMAGE 13.1.
RIGHT—DIAGRAM 13A.

IMAGE 13.2.

ABOVE—IMAGE 13.3.
RIGHT—DIAGRAM 13B.



model differently than one would expect, while the height of the model (relative to the floor) allowed the light to do its job.

I had a minor flash of insight as my first set came to a close. While the model was in the changing room, I moved the two strip lights from the sandbags they'd been leaning on and clamped the edges of the softboxes to the sides of the stage itself. This meant that I'd lose a lot of the light's power because it was now aimed straight up, but it also meant that the light, now coming from an angle perpendicular to the camera, would soften some of the effects of light placed almost directly below the subject. Also, the light would be more even at the bottom of the image because most of it was shooting straight up. This time, however, I metered the strip lights at her waist, producing a hard hit at her elbow while allowing a soft kiss of underlight on her face. You just gotta love it! See **image 13.2.**

UNDERLIGHT FOR POWER

For an extremely dynamic look, ring your subject from behind and below with strong, gridspots.

Using the same platform as in the previous example, I first set a large softbox slightly to camera right, about 5 feet from the model. This would be my main light.

To camera left, I placed a white bookend to bounce light back into the shadow side. The bookend was snugged up, closer to the model, to bounce a strong fill.

I set two strobes, fitted with 30 degree grids, on the floor and aimed them up to the model from each side. They were placed close to the platform to get a dramatic upward sweep and were powered 1 full stop over the main light to blow out detail and create perfectly white highlights over most of the area they would hit. An additional light, a beauty bowl with a 25 degree grid, was set on a boom above, but within 2 feet of the model, and powered to ⅓ stop over the main light as measured at the shoulder. Taking the meter reading from the shoulder meant the strength of the light on the top of her head would be stronger than +⅓. See **diagram 13B**.

The final image (**13.3**), with strong, upward sidelight, features impressively strong highlights. Shape-conforming light like this lends a feeling of aggression, a dynamic of strength, to the image that's not achievable with softer light.

IMAGE 13.4.

UNDERLIGHT AS THE MAIN LIGHT

This technique will work best if your model angles her head down, toward the underlight.

I began by setting my HiLite background behind where my model would be standing. In a bit of reverse engineering, I powered up the HiLite first, to a perfect f/16. This meant that my main light, a combination of two lights, would need to equal f/11 so the background would overexpose by 1 stop.

The HiLite is a very large softbox, lit by strobes that are inserted into its sides. It produces a very even light over its entire surface and is used to create a white background with light that wraps around the sides of a subject. You might also try using a large softbox, or perhaps something like an Octobank, to get a similar look. See **image 13.4**.

After my target f-stop had been established, I set a 2x2-foot softbox on a short stand on the floor, aiming it up to my model's face. The effect wasn't particularly unattractive, but it did have a bit of a bad horror movie look to it. I metered for the correct f-stop, a –⅓ f-stop of f/10. Why f/10? As just one more affirmation of the fact that the effects of light are cumulative. I knew that

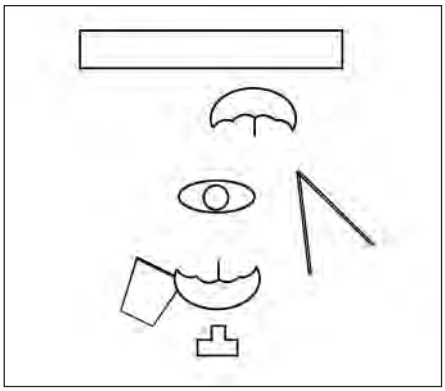
IMAGE 13.5.

IMAGE 13.6.

IMAGE 13.7.

IMAGE 13.8.

DIAGRAM 13C.



when I added the next light, the combination of the two could easily be tweaked to f/11, the target aperture. See **image 13.5**.

Next, I set a light with an umbrella above where my camera would be. I'd turned off the underlight in order to correctly gauge the power of this light, which would act as general fill. Having the model look directly at the camera, and setting the light for a correct shadow, meant she could move to almost any position and still present a proper and attractive nose shadow. Prior to taking a meter reading, I moved a white bookend to camera right, next to the model, to open the shadows and mitigate the future effect of the underlight. This image (**13.6**) was made at the metered f-stop, f/8—1 full stop under the target.

By tweaking the power of the umbrella's strobe, I got the exposure to a perfect f/11. Notice, if you will, that the exposure in **image 13.7**, while correct and showing detail in all white areas, lacks a certain "snap," the little extra that would make the image noteworthy. If you look at the top of her head, you'll probably agree with me that her hair, while holding detail, could look better with a little more life.

I moved an additional strobe and umbrella, mounted on a boom, mostly centered over the back of her head but favoring the right side. I made certain the light was far enough behind the model so as not to throw any additional light on her face, primarily across her nose. Without turning off the other lights, I balanced the new umbrella light to the target f-stop.

Complicated? It sounds like it, but the truth is it took about 15 minutes. When you master the effect (and I hope you do), you have at your disposal one more trick that will set your work apart from that of your competition. See **image 13.8**.

Note that even though there are lots of lights within this scenario, and each one throws something into the mix, the overall exposure is correct because the meter was calibrated to the camera. With that kind of control, you'll never need to shoot RAW files to get results like this. See **diagram 13C**.

DOUBLE MAIN LIGHT AND UNDERLIGHT

In chapter 7, "The Double Main Light," I showed you how two strip lights can be used to create a soft light that produces very interesting catchlights in the model's eyes. While the approach I'm about to describe is similar, the look is quite different.

I began by setting the two strip lights in their horizontal positions, one over the other and separated by about 3 feet. Each light was independently powered and adjusted until the output was the same, then re-metered with both strobes firing. That measurement would be the working f-stop.

My model was posed about 3 feet from the lights. Having her this close meant that a couple of things would happen: the reflections of the lights would be large in her eyes and the lower light would not intrude into the shadow under her chin because her body would block it. I also set a beauty bowl and 25 degree grid on a boom arm over her head, to accent her hair and kick her out of the dark background. This light was powered equal to the other two lights, as measured at the middle of the back of her head, so the top would be only slightly brighter.

The first image (**13.9**), with all of the lights powered equally, was stunning. There was beautiful light from above, with underlight to fill in shadows under her brow and nose, as well as her hair.

You can, of course, vary the power of the underlight for a more subtle effect. **Image 13.10** was made with the underlight at ⅓ stop less than the upper light. The catchlights in the model's eyes are still spectacular, as are the reflections on her lipstick, but her face is slightly more contoured than in the previous example.

A wardrobe change to a lighter garment pointed out a potential problem that you may encounter, too. Because she's so close to the lights, the underlight is stronger where her body gets closer to it. The lighter cloth and the position of her elbows meant a further reduction in power would be necessary to avoid blowing out any detail. I reduced the underlight by another ⅓ stop, now ⅔ stop less than the top light. In **image**

TOP—IMAGE 13.9. **BOTTOM**—IMAGE 13.10.

TOP—IMAGE 13.11. **BOTTOM**—IMAGE 13.12.

13.11, the catchlights and reflections are still terrific, and her face is more contoured, but the exposure in the bottom third of the frame is equal to the rest of the image.

Image 13.12 shows what the setup looked like from behind the model. The camera was positioned directly in front of her head.

14. GREENSCREEN

This is a chapter that I've looked forward to writing for a long time.

Removing a background, or "dropping out" a background until it's transparent, and inserting a new scene behind the subject is often difficult. Photoshop has its Extract tool, but it's far from perfect. There are also third-party plug-ins that will do the job. I've tried many of them. My favorite method—though not perfect—is greenscreen.

Greenscreen technology, along with its sister, bluescreen, relies on a very simple principle: their bold coloration is not found in skin tones and, for that reason, software can be used to easily target and eliminate the color, leaving you with a selection of the important parts of your image, which can then be magically placed against another, separately photographed and idyllic new background. The technique has been used in video for years (known as Chroma Key), and you see it in action every night on the news when the weatherperson stands in front of a map and tells you (with a great deal of error in my part of the country) the forecast for the next few days. The "map" that's being discussed does not actually exist behind the newscaster—it's a separate graphic that's digitally inserted into the green or blue field behind that bearer of good or bad news.

When I began my greenscreen experiments, I used a muslin background that was dyed to the target color. It was such an ugly color that I wanted to easily pack up my "greenscreen" when it was not in use. I've since found so many uses for greenscreen that I decided to make a commitment: I painted my primary shooting wall green. It's hideous, but it makes so much money for the studio that I gladly put up with it. I'll explain more about how that works for me later.

Rosco also makes bluescreen and greenscreen paint. Unfortunately, it's quite expensive (about $100.00 per gallon) and provides poor coverage. After trying it, I went a hardware store, chose a swatch of paint that was as close as possible to the Rosco paint, and had them mix a gallon. The "makeshift" paint cost 70 percent less and worked just as well. **Image 14.1** gives you an idea of what the color looks like; however, bear in mind that the printed page may not match the real color perfectly. Note too that several shades of blue or green will do the job—just choose one that is so ugly that you won't see it in flesh tones or in most clothing.

IMAGE 14.1.

There are plenty of software programs and plug-ins that you can use to drop out a greenscreen. If you're a software developer or someone who has a better solution than what I'm about to propose, please let me know (chris@christophergrey.com). I promise I'll try it and let my little corner of the world know how I feel about it.

My favorite green/blue screen application is Ultimatte's AdvantEdge, a Photoshop plug-in that, for what it does, is quite fairly priced. Ultimatte's plug-in also works with Final Cut Pro video editing software, although the license fees may be different. You can try the fully functional software for free on their web site (www.ultimatte.com), but you will not be able to save

a non-watermarked image without the special dongle key that you get when you actually purchase the goods. AdvantEdge works with both green and blue.

When I set my lighting for greenscreen, I typically use two strip lights, one on each side of the background and feathered so the exposure value is no more than ⅔₁₀ stop off over the entire background. Although it's not entirely necessary to do so, I use a dedicated power pack for these two lights. I'll also put a black bookend or other gobo between the lights and the camera, to prevent any spill or flare.

Now, your experience may dictate otherwise, but mine says that light on the greenscreen (or bluescreen) background works best when it's metered to read around a stop under the main light. The extra saturation seems to help the software make a clean extraction of the subject. I also think it best (unless the situation warrants it) to keep the subject at least 8 feet from the background wall (farther is better) and to flag off as much bounce light as possible. The software will read any colored spill from the background and eliminate it wherever it falls on the client. In other words, if 25 percent of the light bouncing from the background onto the subject is green (or blue), then 25 percent of the subject will be made transparent, allowing 25 percent of the background to show. This is a tool that can be used to your advantage, but you must understand how it can impact your images before diving in.

Ready? Begin by setting and metering the two background lights so they're as even as possible across the width of the background you wish to use. For single subjects, this is quite easy, especially if you're shooting with a telephoto lens and can narrow the perspective between what's lit evenly and what is not.

With your subject placed at least 8 feet in front of the background, set the main light in place and power it to 1–1⅓ stops over the background light as a starting point. Remember that the main light will have some influence on the background (another reason to keep the subject as far from the background as possible). When the influence of the main light is figured into the equation, the ratio of main light to background light will be close enough for government work. Note that it's a ratio that's not carved in stone. Close counts—however, it just seems easier for the software to remove the background if the ugly color is a bit darker. Could you find a color that's a bit darker and light everything evenly? Possibly, but given the degree of difficulty involved with lighting a background large enough to accommodate a group (perhaps one that stretches across

IMAGE 14.2.

IMAGE 14.3.

IMAGE 14.4.

the expanse of the backdrop), you should not allow the background to be too dark or you'll have to make some adjustments by hand, a tedious process. You can't allow the background to be lit by just the main light, either, as shadows may come into play that might be difficult to remove.

So, here's the first image (**14.2**). Notice that the model's hair is separated in a number of places, sometimes only a few strands wide, allowing green to show through. Also, notice her tattoo. The green in the frog will also become transparent, at least to some degree. I'll show you how to deal with that in just a bit. *(Note:* This chapter isn't meant as a software tutorial beyond the very basics. I won't be providing step-by-step instructions on how to use the software—just great information on what you might do with it.)

Before using AdvantEdge, you'll need to duplicate the original image layer.

You'll need to sample the background color. Once that is done, the program will let you soften the blend of color densities in the background and clean up minor imperfections such as where a wall would meet the floor. You'll also be able to adjust for color spill, eliminating most green fringing.

When AdvantEdge has completed its cycle, you'll see that the second layer has been rendered transparent. Deselect the first layer to judge the quality of the image. I find that duplicating the transparent layer will often add density to a model's hair and clothing. Although you will not see this as a transparent background (because the paper is white), you can see how effectively the green was removed. See **image 14.3**.

As I mentioned above, the green in the frog tattoo was rendered transparent. Photoshop automatically takes a "snapshot" of a file when it's opened. Use the History Brush to paint the original color back into the frog (or anything else that's affected by the filter). Note that if you change the size of the original, or crop into it, you'll have to make a new snapshot before you use AdvantEdge if you want to paint anything back into the image.

Now that the correct colors have been returned to her tattoo, it's a simple matter to open another file to serve as the background, drag the transparent layer onto it, resize or reposition it if necessary, then flatten and save the image. See **image 14.4**.

I'm sure you can see the possibilities for this immediately. As long as the lighting and, especially, the camera angles in the studio shot and the background you wish to add to the image are reasonably well matched, your results will be golden. You no longer have to risk a crowd gathering around your sexy model as you're trying to take advantage of an urban location in the middle of the day. See **image 14.5**.

Photoshop and a plug-in as potent as AdvantEdge can be an incredible combination. The key to creating successful images of things that don't exist is to preplan. Think the shot through, thoroughly, and try to anticipate problems. Most importantly, try to picture the finished shot and figure out what you could do to make it more believable.

Some of you, gentle readers, may find this next image disturbing. I apologize if that's the case (but thanks for the e-mails). Photography is an art form that investigates all aspects of life and of boundaries, docu-

IMAGE 14.5.

TOP—IMAGE 14.6.
BOTTOM—IMAGE 14.7.

menting the staid while pushing the envelope of the new.

This image, meant to look as if the model had been standing in a lake of fire, utilized five strobes, fitted with grids and varying degrees of CTO (Color Temperature Orange) gels. CTO gels convert daylight-balanced light to incandescent-balanced light. They are available in strengths ranging from ⅛ to full strength. When the daylight color balance preset is selected on the camera, the sensor will record the light based on a 5200–5500K color temperature. Using light that's closer to 3400K will make the light appear substantially warmer. Look closely and you'll see that the model was mostly lit from below, to reinforce the look of light from fire.

The model, of course, was unharmed in her green-screen environment (although the final image did give her husband a bit of a jump). Two shots of a bonfire were combined in Photoshop to give the illusion of flames around her. Her figure was placed into the flames, masked in Photoshop, and given the appearance of dissolution into the flames. The water reflection was provided by a third-party Photoshop plug-in called "Flood" (www.flamingpear.com). See **image 14.6**.

Greenscreen or bluescreen work can be valuable to your studio's bottom line. Those of you who do corporate portraiture may have a number of clients who prefer to have their employees photographed on location in the office. I'd suggest you only drag all the gear into their offices once, document the best locations for backgrounds, light them like portrait backgrounds, and create a file of those images. Hauling in and setting up lighting is a serious disruption to the general flow of an office. Consider the value to the clients if you only have to do that every few years, while you shoot their new personnel in the comfort of your studio, dropping in backgrounds as you go. Consider your value to the client if you're the only photographer offering this kind of service. In essence, you're creating client loyalty, something that's often lacking in our highly competitive environment.

IMAGE 14.8.

This is also a terrific way to approach stock photography because you can shoot whatever subjects you wish and place them into almost any environment. See **image 14.7**.

For many forms of portrait photography, greenscreen is a very inexpensive alternative to other methods, such as front projection. I've created numerous inexpensive, royalty-free backgrounds, many in varying degrees of focus, individually downloadable from www.christophergrey.com/backgrounds, for a small fee per piece. They are large files that can be used digitally or converted to film for front projection systems. This boudoir image **(14.8)** used one of the bedroom backgrounds included in those available downloads.

The biggest problem I've encountered with AdvantEdge is that it doesn't like processed blond hair. It tends to turn it slightly magenta at the edges. This effect can be counteracted somewhat by placing a 5cc or 10cc magenta gel on the hair light (worthwhile if your clients are processed blond or not). The magenta from the gel will counterbalance the green that spills through the light hair but will not entirely eliminate the magenta fringe. I know that sounds slightly improbable, but it helps because it's a complementary color to the green, adding the complement and reversing some of the green effect before the image is processed. One other problem is that if you duplicate the transparent layer you might add an extra line of density to one side of the subject.

One other problem I've had is with full-length figures. The green tends to reflect up onto the shiny leather of shoes. Of course, those reflections will "disappear" when the green is removed, and be replaced by the background. When the background is a solid color that's usually not a problem, but it can be if the background is a complicated image. I usually have my subjects stand on a piece of white paper when I do full-length images, unless they are wearing white shoes. It's easier to select and eliminate the white paper than it is to try and paint the shoes back in place. You may also have to add a "contact shadow," the point where shoes contact the floor. If you don't, your subject(s) may appear to float within whatever environment you place them.

These problems are not deal breakers, you'll just need to play with the software to see if you like it. I have, and I do. Try other drop-out plug-ins too. You may find something else that's perfect for you and your workflow, and "you" is the operative word.

There are several examples of greenscreen photography in upcoming chapters. I'll point them out as we go along. You'll see what I mean when I say it's a valuable tool.

15. USING REFLECTORS IN THE STUDIO

You can achieve some beautiful lighting effects by using reflectors instead of additional lights—and as either fill or main light. Foamcore bookends are my favorites when I need to open up the shadows, but the circular, collapsible kind are more versatile because they can be set at odd angles when attached to accessory arms and mounted on stands.

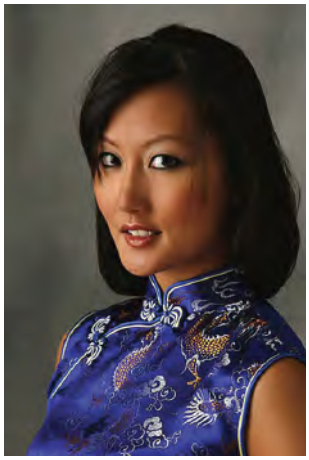
Obviously, using a minimum number of lights along with reflectors will require a little more thinking on your part, but at least you'll be able to see where your light is going simply by moving the reflector or changing the angle before locking it down. Should you use a flash without a modeling light it will be very difficult, if not impossible, to determine the correct angle for any reflector.

As you read on, you'll note that I'll use only one light for each setup, but the modifiers will change.

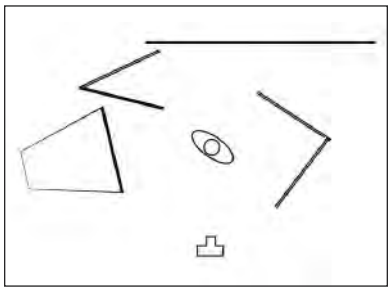
In the first scenario, I used one light modified with a large softbox along with two bookends. One bookend was used for bounce and the other was used for control. It's a versatile setup.

I started with the largest softbox in my arsenal—the 4x6-foot one. I could just have easily used a medium softbox, the only difference would be a slightly more specular light which would not have significantly affected this scenario. The truth is that I can be a little lazy. The large softbox had been set up for an earlier shoot and I just didn't feel like tearing it down.

I set the strobe at camera left just far enough from the background so that I could slide a black bookend between the softbox and the background, to keep most of the softbox light off the background. Even though it looked like the background would be so dark as to not register, having the light so close meant that, although it would be represented as darker, enough light would reach it to represent it adequately. The Inverse Square Law at work.



TOP LEFT—IMAGE 15.1.
TOP RIGHT—IMAGE 15.2.
RIGHT—DIAGRAM 15A.



The second bookend was placed to camera right of the model, on a straight line from the main light softbox, about 3 feet away from her and opened into a wide V, to wrap bounce light around her, just bright enough and wide enough to show gradation and form. See **diagram 15A**.

When placing the main light in a position that allows photography of a full or ¾ profile, be sure to meter by aiming the meter at the light, not the camera. In cases like this, the difference between the main and the fill is so great that, if you aimed the meter at the camera, the resulting average would be biased so far to the shadows that the highlights would be seriously overexposed. See **image 15.1**.

Finally, I thought I would soften this light even more, using an extra piece of diffusion material, a circular, translucent Photoflex reflector placed between the

subject and the main light, about 2 feet away from the strobe. The result (**image 15.2**) is beautiful.

Next up, we have a very simple yet very dramatic scenario that produces a bright, symmetrical hair light and a delicate main light using only one source.

I began by setting a strobe fitted with a 21-inch beauty bowl on a boom, behind and centered on the chair. When my model was in place, I finessed the light, moving in close enough so the light would spill over the top of the chair and the tops of her shoulders. A word of caution here: be sure the light is not so overhead that it spills over onto the nose. That's the worst place for an extra highlight!

To get the delicate main light, I moved a white bookend in at camera left and another at camera right. The camera-left bookend was placed quite close to the model and angled toward her face, while the camera-right bookend was placed a little farther away and angled parallel to the chair. See **diagram 15B**.

Placing the bookends in this manner accomplished two things: the bounce was brighter from the left, creating a sense of "source;" the right side bounce was effective as fill yet asymmetrical due to its placement.

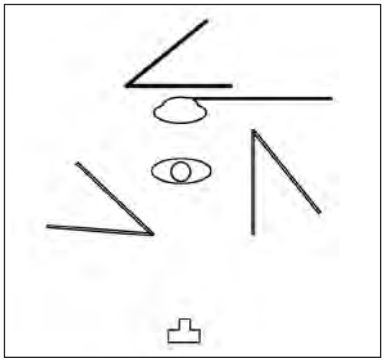
The end result is a beautiful and evocative portrait. Note how the symmetrical position of the model, the chair, and the light defy conventional rules of composition. Also, note that you could create much the same effect with a standard parabolic reflector but the highlight will have a more specular look than what you see here. You could use a softbox for a less specular look, but if you do, you'll need to flag it to keep light off the lens. See **image 15.3**.

So, what do we have here? Three gorgeous portraits made with only one strobe and modifier (softbox or beauty bowl) plus one background and three sheets of 4x8-foot foamcore (one black, three white). The strobe is the most expensive part of the equation. All other pieces are relatively to extremely inexpensive, and the extra diffusion is optional. The best part is that these images were made in a very small space, certainly less than most working studios typically use.

Now, let's see what we can get using collapsible reflectors. They're available in a variety of surfaces, with differing levels of reflectivity and varying diameters. My favorites are those made by Lastolite. Their opaque reflectors show a different surface on each side. If you're working outdoors but only have one reflector with you, you'll still have options.

I began with a single strobe fitted with a 20 degree grid, set on a boom arm and centered over the model. It was angled so that no light from the strobe actually fell on the model and, instead, was aimed at a large Soft Sunlight Lastolite reflector on an accessory arm. The reflector was angled so the reflection would fall on the subject and act as the main light.

My first image for this set shows a beautiful, soft-edged light with relatively hard shadows. The reflector had been mounted directly over the camera, producing the characteristic butterfly shadow under the model's nose. I did not custom white balance for the reflected light because doing so would have negated the some-



FAR LEFT—IMAGE 15.3.
LEFT—DIAGRAM 15B.

IMAGE 15.4.

IMAGE 15.5.

IMAGE 15.6.

what cool cast of the reflected light—and I wanted you to see the effect. See **image 15.4**.

I was a bit worried about tonal merger in this scenario. By playing with the angle of the reflector, I was able to throw light on the background without changing the angle on the subject. This is the best of both worlds because the background was just bright enough to accent the model and give the image greater dimension. See **image 15.5**.

The final touch for this shot was the addition of a Lastolite Silver reflector below the model and aimed at her face. It was angled to pick up a bit of spill from the Soft Sunlight reflector and beam it back, filling in the shadows. The silver reflector will kick back more light than the Soft Sunlight, so the shadows fill with a strength almost equal to that of the primary reflector.

The secondary catchlights in her eyes (**image 15.6**) are brighter than the catchlight from the main light reflector because there are no eyelashes to diffuse them. You can choose to leave them or remove them.

Another way to approach this is to use the single light as a strong backlight, creating bright highlights in the model's hair and clothing while using some reflected light as the main light. This example will again use the Soft Sunlight reflector as the main light and different silver reflectors for accents.

I began by setting a strobe with a standard parabolic reflector (without a grid) on the floor directly behind the model and aimed up to catch the edges of her clothing and hair. The parabolic reflector caused the light to spray from the tube in a wide arc, and I wanted to take advantage of that fact. I used a Soft Sunlight reflector to direct light back to the model's face and placed a Soft Silver reflector to camera left and with the center above her face. This reflector would bounce light to the side of her face. The Soft Silver creates a softer reflection than a straight silver reflector but still adds some punch.

The result (**image 15.7**) is strong light with soft highlights reminiscent of a strip light but slightly harder. The actual strobe, where it hits the model's hair and clothing, is roughly 2 stops brighter than that which reflects to her face. Note that I say "roughly" because, well, it was close but would have necessitated several more minutes of moving reflectors to get a perfect third or whole stop, but there was no point to it. The idea is to get some degree of overexposure, and we were in the range. Overexposed is overexposed.

There is an opportunity here to create a third light, to mimic a hair light, by adding another reflector. A basic silver reflector, delivering punchy light, was clamped to an accessory arm and angled toward the model's hair and shoulder. See **image 15.8**.

The final result is gorgeous: moderately hard light on her face, a softer reflection from camera left, plus two varying degrees of harder light combined to create a believable, beautiful scenario, created with only one light. Yes, the setup takes a little bit of time, but perhaps it is worth it to you to save the money you'd spend on the extra strobes you'd need to replicate the effect using additional light sources. See **image 15.9**.

IMAGE 15.7.

IMAGE 15.8.

Although it is usually an unwelcome guest in our images, flare can be a source of creative inspiration.

The setup for **image 15.10** was simple: a 2x3-foot softbox was set behind a 36x72-inch translucent white Photoflex panel, turning the entire panel into a large softbox. A large, collapsible, circular Lastolite Sunlite reflector was attached to an accessory arm and aimed to reflect some of the softbox light onto the model. I began with the reflector about 6 feet from the model, resulting in a minimal effect and a great deal of wrap-around flare that hit the sensor. The effect is dreamy, like looking at a lover backlit by a bedroom window.

There is no way to tone down the amount of flare by simply turning down the power of the strobe's generator, as the ratio of light to flare will stay the same as the aperture is opened up. Your best option is to move the reflector closer to the model, about 2 feet away, as I did in the next example. The decrease in distance made the reflection brighter and meant a smaller f-stop and less brightness from the rear. Narrowing the gap between the source light and the reflected light meant less flare would be evident in the final image (**15.11**), though it was not totally eliminated.

IMAGE 15.9.

IMAGE 15.10.

IMAGE 15.11.

16. A FEW TRICKS WITH COLORED GELS

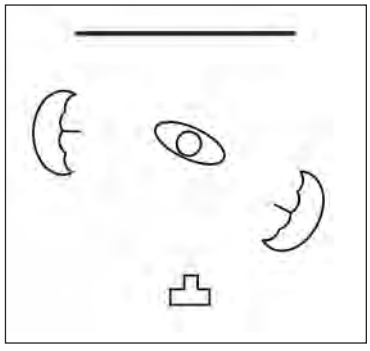
Color is an important aspect of beauty and glamour lighting. Whether it's used to add mood, warmth, or to accent part of a scene, its effect can range from subtle to extremely bold. Here are just a few ways to work with accent color, along with a couple of nifty Photoshop tricks to get even more out of your shoot.

Rosco produces a line of colored gelatin filters that are primarily used for theatrical productions but have many applications for photographers, especially when used in conjunction with some of the custom controls available on digital cameras.

One of the greatest creative tools you have in your digital arsenal is the ability to custom white balance to almost any color temperature. This allows you to shoot under virtually any color temperature (cameras will vary—check your manual) and the final result will look perfectly normal. This eliminates the need for expensive color temperature light meters and opens the door to a level of creativity never before seen.

In the days of film, we would routinely cover lights or windows with whatever colored gels we needed to balance the ambient light to get a correct balance between that light and our light. The results were frequently somewhat disappointing because the differences between the gels, the color temperature of the ambient light (due to weather conditions), and the inherent color temperature of the film were all slightly different. If we shot color negative film, we could rely, at least to some degree (and this usually depended on the price we paid for the print) on the skill of the darkroom technician. With color transparency film we were entirely on our own. The technicians couldn't do anything beyond adjusting film speed by extending or decreasing processing time, and color corrections, at least on an original image, were out of the question.

ABOVE—IMAGE 16.1.
LEFT—DIAGRAM 16A.



For **image 16.1**, I began by flooding my set with a cyan gelled light from camera left that also hit and illuminated the side of my model's face. I positioned her about 5 feet from the background so the light would fall off a bit and be darker. The light on her came from

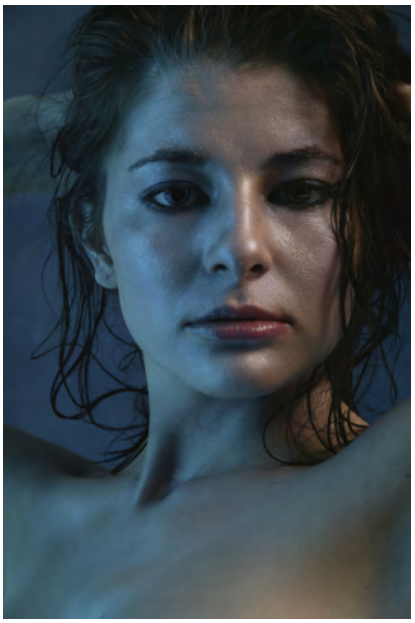


IMAGE 16.2.

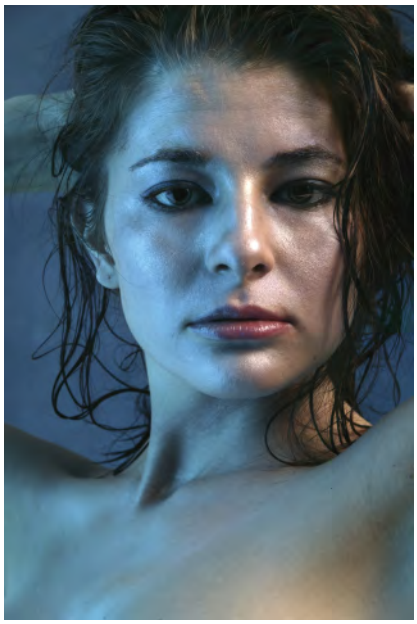


IMAGE 16.3.

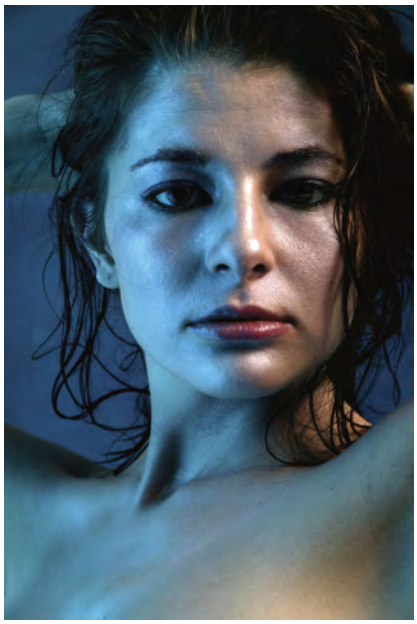


IMAGE 16.4.

a simple 36-inch white umbrella, from camera right, to provide the defining, normal, light on her face.

I lit my scene a bit differently this time in that the main light was actually the light with the cyan gel. I'd taped the gel over a simple parabolic and aimed it into the side of a white bookend, bouncing the light to the side of the model. I placed a black bookend between the light and model to soak up the brighter highlight that would have hit the back of her head and shoulder.

The "normal" light was a 36-inch umbrella, set to camera right. I placed an additional black bookend next to the model to keep light off the background, a 4x8-foot painted sheet of Styrofoam, positioned far enough behind her to be out of focus but close enough to fill the frame. While this light would usually be considered the main light, it was now a fill light and was aimed primarily at the black bookend so she would be skimmed with the edge of the light rather than hit with it directly. I powered this strobe to be ⅔ stop under the main light, so while the main light (the cyan gelled light) and the camera were both at f/8, the fill was f/6.3. See **diagram 16A**. I sprayed my model with water from a household atomizer to get the sheen on her skin and to mat her hair a bit.

I sprayed her periodically as she moved in front of the camera, both to keep the sheen alive and to add more moisture to her hair. Shots like this are a bit difficult because you're going for a particular look, which means that you must interrupt the shoot to apply more water, which interrupts the flow of the session. In such cases, I'll frequently show my subjects some of the previous shots before reapplying the effect, just to let them know I think we're on the right track.

PHOTOSHOP TIP

I liked the look of these images, but thought they would benefit from a change in contrast and brightness, to give the shot a look that would be tough to achieve with lighting alone. We know that underexposure by more than ⅔ stop is difficult to adjust to look "normal" because the highlights end up too bright and contrasty. Still, I felt these images would benefit from an unorthodox approach.

I began by underexposing by 1 full stop, setting the camera from f/8 to f/11. The result (**image 16.2**), by itself, is less than stellar. It looks like something one might get by using the camera's LCD as a light meter.

There are two easy options in Photoshop to get to what I wanted. For either approach, one must first convert the image to 16 Bits (Image>Mode>16 Bits/Channel). For the first option, open Levels and drag the highlight slider under the right-most edge of

the histogram data. You'll see the contrast and brightness increase. When you get to a level you like, convert the image back to an 8 Bit file, then do a Save As to create a new file. The original file will remain unaltered. See **image 16.3**. The second option is to use Image>Adjustments> Brightness/Contrast (don't forget to change the image to 16 Bits) to get an effect you like. For this image, I set the Brightness slider to +10 and the Contrast slider to +40. See **image 16.4**.

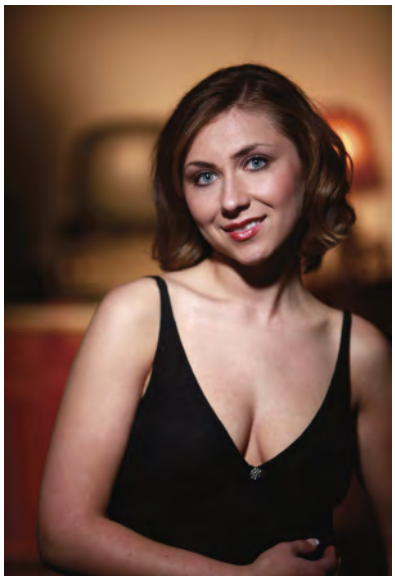


IMAGE 16.5.

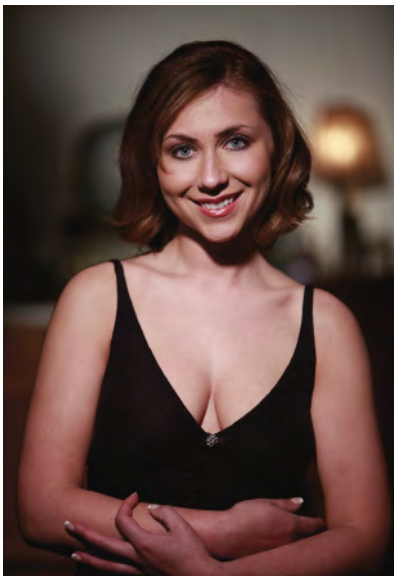


IMAGE 16.6.

When you convert to 16 Bits/Channel, you are fooling the file into thinking there is more information in the file than there actually is. The benefit to converting back to 8 Bits/Channel is that there are minimal, if any, gaps in the histogram. Gaps indicate a lack of pixels for a particular tone. If the gap is wide enough, you may see "banding" when tones that don't exist attempt to blend with those that do.

Another really nifty trick is to use colored gels to double the saturation of what would be considered a "correct" white balance.

Rosco makes a number of gels meant to turn daylight-balanced light into color that matches incandescent light, and vice versa. CTO gels (discussed in chapter 14) will lower the color temperature of strobes from 5200K (daylight) to 3400K (incandescent lights). Conversely, CTB (Color Temperature Blue) gels will raise the color temperature of incandescent sources to approximately that of daylight. Both CTO and CTB gels are available in strengths from ⅛ to full strength.

I began this set by lighting the background with a 650-watt hot light. The model was lit with a studio strobe (there was no gel on the strobe), and the camera

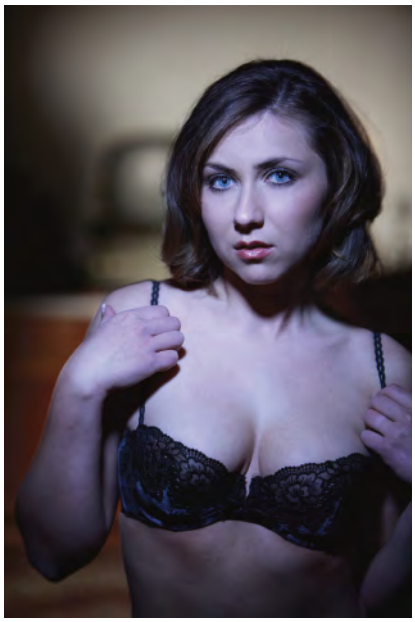


IMAGE 16.7.

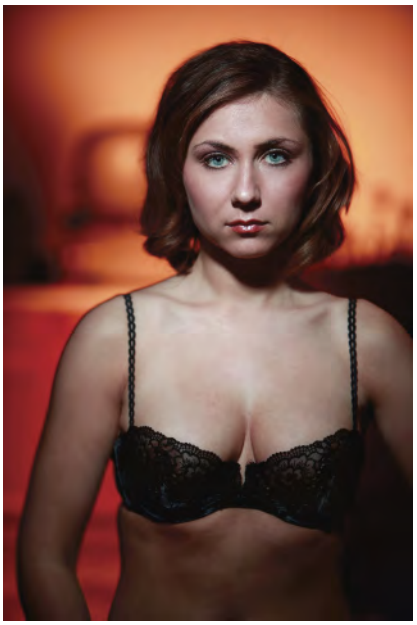


IMAGE 16.8.

IMAGE 16.9.

was set to the daylight white balance mode. My model was lit with the proper color temperature, but the background light registered much warmer because its color temperature was substantially lower than the main light. Even though the incandescent light was very bright, it still required a dragged shutter speed of 1/6 second to register correctly at f/2.8. See **image 16.5**.

I put a full CTO on the strobe and powered it to the same f-stop as before, f/2.8, then set the camera to the incandescent white balance setting. Notice that there's a color shift from the gel. This could be because of the actual color temperature of the strobe tube or a minor manufacturing error. It is a problem that's easily dealt with via custom white balance. **See image 16.6**.

My model decided to change her clothing. While she was in the dressing room, I changed to the main light because I wanted an overly warm background. I put a full CTB gel on the strobe but kept the incandescent white balance setting on the camera. **Image 16.7** shows how much blue the CTB gel throws into the mix.

After moving the model out of the scene and substituting a neutral gray target, I shot a picture under the blue light and performed a custom white balance. Because I told the camera that I wanted the blue light to be neutral, the camera added enough digital red and yellow filtration to the image to render the off-color light as normal. The background incandescent light, now substantially warmer (to the camera) than it was before, registered with an overabundance of yellow and red even though my model looks normal and neutral. It's a great trick. See **image 16.8**.

For the next shot, I doubled the shutter speed, to 1/3 second, making the background 1 stop brighter (and picking up a little warm-light spill on the model). I planned to take this technique a step further by moving the camera during the exposure, asking the model to move, or both. The model, with only enough light falling on her for the camera's auto focus to lock on (but not enough to overly influence the image), will be rendered sharp and in focus, but the edges will blur. How much will depend on the speed and extent of the movement. See **image 16.9**.

Another way to heat up the background while adding gelled highlights is to wrap a gel around the tube inside a softbox. When properly placed, the light will color the background and any highlights that fall on the model.

This shot utilized a strip light (a small or medium box would do nicely, too) with a full CTO gel formed into a bubble shape and taped to the speed ring inside the box. It was suspended over the model with a boom arm and powered up 1/3 stop over the strength of the main light. The model's main light, a beauty bowl, had been fitted with a 25 degree grid to give the light a quick falloff to shadow. See **image 16.10**.

IMAGE 16.10.

IMAGE 16.11.

Here's a great Photoshop method for creating the look of gelled light without actually using colored gels. As you can see from image **16.11**, gelled light can cover, and color, almost everything the main light misses if you set it correctly. Let's say you like the effect but don't know what color gel to use or you don't have a collection of gels. This is a beautiful workaround technique if you start with a strongly colored

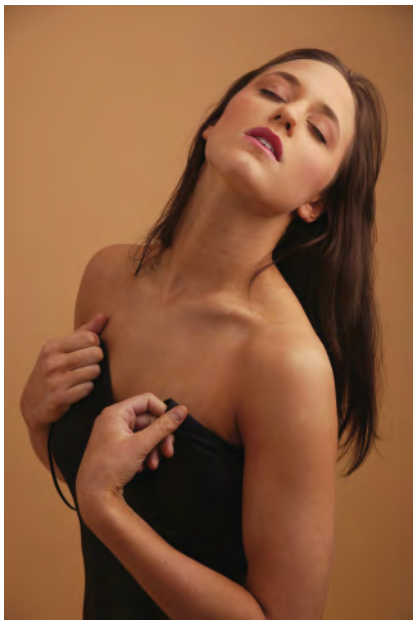


IMAGE 16.12.

IMAGE 16.15.

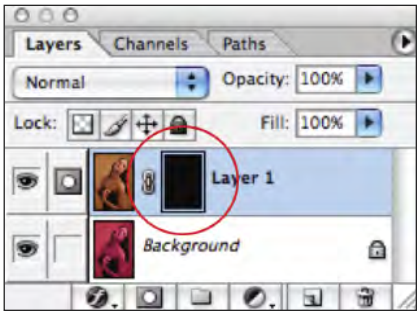
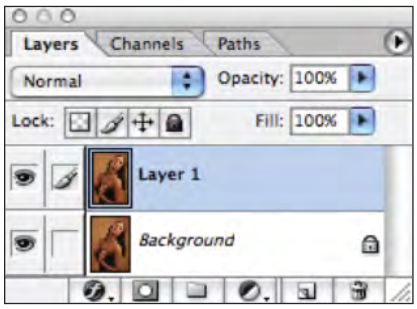
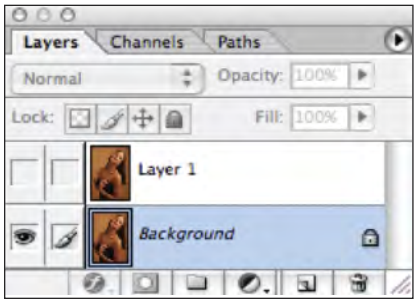


IMAGE 16.17.





TOP—IMAGE 16.13. **BOTTOM**—IMAGE 16.14.

IMAGE 16.16.

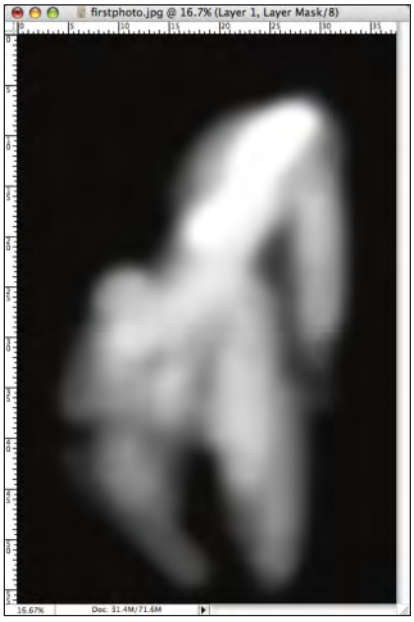


IMAGE 16.18.

background. Pastel backgrounds will work but are not as versatile. White or black backgrounds will not work beyond a very minimal level, and neutral gray is always neutral. (I'm sure this trick will work for some images with black or white backgrounds but, in my opinion, it will be more difficult to get a perfect mix of color and original image because your options will be limited.)

So, let's start with an image shot against a saturated background (**image 16.12**). In Photoshop, duplicate the background layer and label it layer 1 (**image 16.13**). Select the background layer and click on the layer visibilty icon for layer 1 to hide the layer (**image 16.14**).

Go to Image>Adjustments>Hue/Saturation and use the hue slider to select any color you wish, then click OK (**images 16.15** and **16.16**).

In the Layers menu, click on the empty layer visibility box to the left of layer 1 to make the layer visible. Go to Layer>Layer Mask>Hide All. See **image 16.17**.

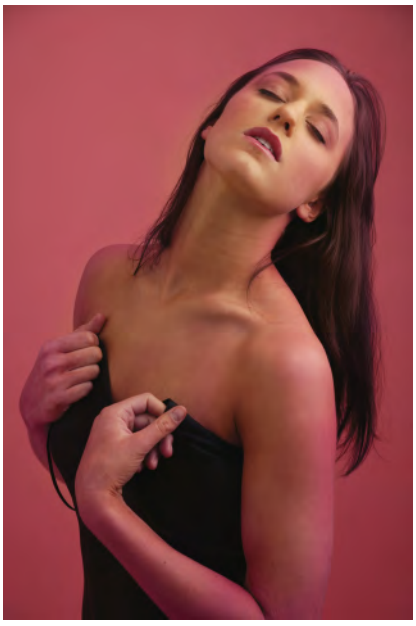


IMAGE 16.19.

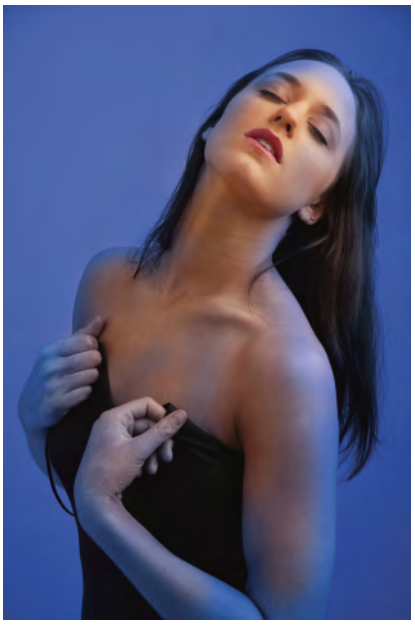


IMAGE 16.20.

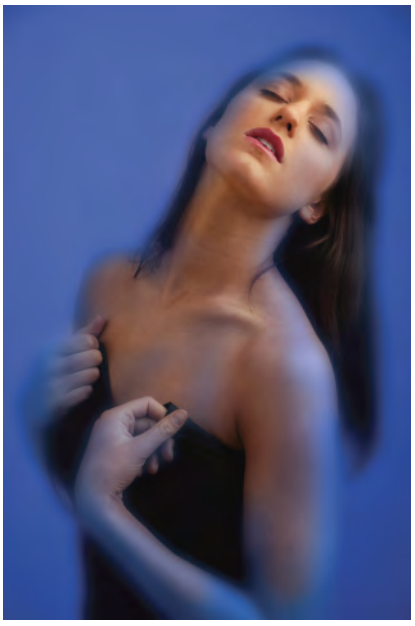


IMAGE 16.21.

Select a brush with a very soft edge. Select the white swatch as the foreground color, change the Opacity tool setting at the top of the screen to 10%. Next, use the brush to paint away the mask so that you can see the underlying layer. The slight opacity will guarantee a soft edge (the strokes must be overlapped to eventually become opaque). Here's what the mask for this image looks like. See **image 16.18**.

Here's what the final effect looks like using two variations of Hue, Saturation, and Lightness. See **images 16.19** and **16.20**.

You can amp up the effect of this faux gel by adding a Gaussian Blur to the background layer. The effect is similar to light painting, a technique in which a variety of soft focus filters were used for various portions of the images. This image (**16.21**) was made with a Gaussian Blur at a Radius of 42.

If you don't like what you see, you can paint over the mask using a black brush, and the integrity of the mask will be restored.

17. BEAUTY AND THE BARRIER

It's always fun to work with a concept that plays against type. For beauty and glamour, where the subject is most always perfectly represented, one of my favorite approaches is to shoot through cloth, paper, glass, Plexiglas, or some other kind of barrier.

Let's start with cloth. I've spent a fair amount of time looking through fabric stores for cloth that was transparent enough to shoot through and impart a certain air of mystery and beauty to my images. There are many types of fabrics that will work for exercises like this—glitter organza, lace, bridal underskirt, tulle—and many more. I'll leave it to your own exploration of the fabric store to find what works for you. One thing to note: Many of these fabrics are available in 42-inch widths, and some as wide as 54 inches. If you want to wrap your client in fabric, remember that wider is always better.

TOP—IMAGE 17.1.
BOTTOM—IMAGE 17.2.

CLOTH FOR MOOD

Almost any cloth you can find will be available in a variety of colors. As you know, colors often set the mood; cooler, bluer colors can denote inwardly directed emotions such as thoughtfulness, peace, or even depression, while warmer, redder colors can denote excitement, enlightenment, and warmth.

This first image was made through a large piece of colored tulle, hung over a boom arm between the model and the camera. There were actually four layers of cloth in play here, as the cloth was doubled over the boom arm, two layers on each side, and she was in the middle. This was done to keep the background color consistent with the foreground color and to further soften the light reaching the model. A single light and medium softbox provided the illumination, creating very soft light and coloring the model with the color of

IMAGE 17.3.

the fabric. The light was set on the outside of the fabric to illuminate both the model and the fabric. The extra emphasis on the fabric adds to the soft mystery seen in the model's face. See **image 17.1**.

We tend to buy colors we're comfortable with or those we feel we can use most often, but it's just as much fun to force ourselves to think beyond our comfort level. Try a deeply colored fabric in a nontraditional tone and let the model's skin tone play against it. The result may be so beautiful you'll wonder what took you so long to think of it. I bought this piece of fabric on a whim and have only used it a couple of times, but I'm really happy I have it. See **image 17.2**.

CLOTH AS A BARRIER

When lit from the side or behind, the model's shadows (thrown onto the fabric by the light) add interest to the look of the image. When the model places parts of her body into the fabric, they draw the eye to them because they are darker. It will take a little investigation for the viewer to actually see the details in front of the shadows. Such a technique can be very useful for those of us who do boudoir or fine art nude photography.

Note that the weave of the fabric, when it overlaps, may create an interesting moiré pattern. The actual size of the weave will determine the amount of moiré (or the lack thereof). See **image 17.3**.

There are times when you'll have to make a creative decision between how much light you'll need to get a silhouette and how deep the silhouette will have to be to get the message across. In chapter 5, "Silhouettes and Backlight," I explained how a large sheet of cloth could be hung between supports and turned into a super-softbox. I also noted that you might see a ghost image of the backlight through the fabric.

Such was the case with **image 17.4**. When the strip light backlight was strong enough to turn all of the fabric white, the wraparound effect of the light, even though it was narrow, diluted the model's form and shadow so much that it reduced the dramatic feel. To get shadow deep enough to be dramatic and form-fitting but bright enough for detail, I settled for an aperture ⅓ stop brighter than the light coming through the

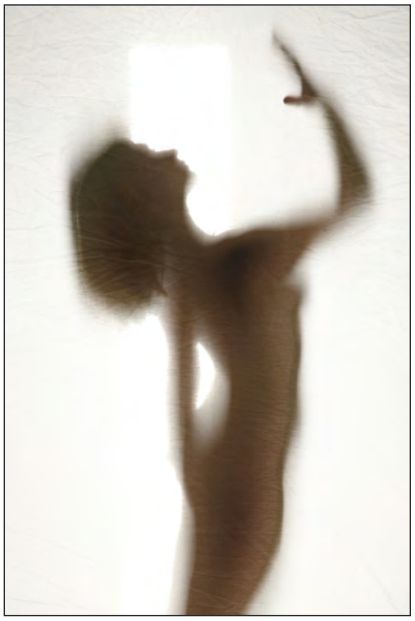


IMAGE 17.4.

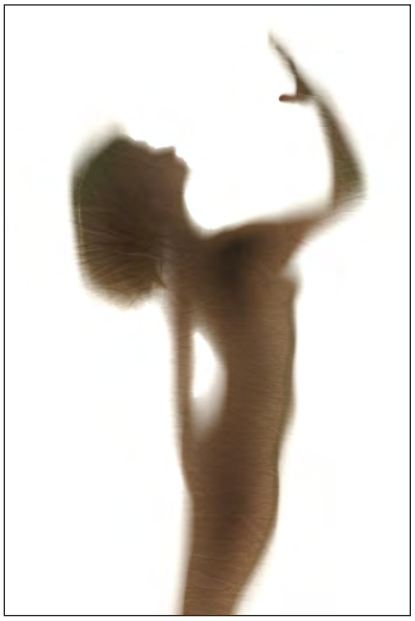


IMAGE 17.5.

cloth, bright enough to get the form I wanted but not bright enough to eliminate detail in the hanging cloth.

Fortunately, this was a very simple fix, involving nothing more than adjusting the highlight slider in Photoshop's Levels until the area around the model was pure white. The remaining vignetted corners, where the light from my strip light was weakest, were simply erased to white. This is a good time to reiterate how much I like wrinkled cloth, especially when the texture is overlaid on the model. See **image 17.5**.

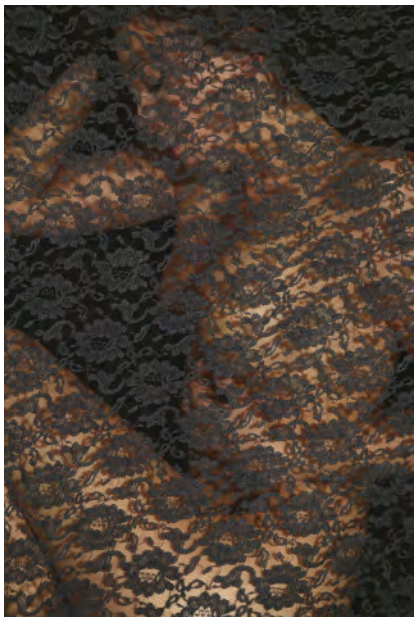


IMAGE 17.6.

IMAGE 17.7.

CLOTH AS DESIGN

You can use a lace fabric, especially one with a large pattern, in at least two ways to get terrific results. For example, if you use just one light, like the beauty bowl I used for this image (a small softbox or umbrella will work, too, but the shadows will be different), the fabric will cast a lacy shadow on the model. This light was overhead, slightly ahead of and to the right of the camera, throwing the shadows slightly down and to the left. This is not the only position for the light, of course, but it's a good place to start. See **image 17.6**.

IMAGE 17.8.

Stretch the lace fabric across the set and set two small softboxes or strip lights under the cloth so that no light spills across the top of the fabric and you'll get a wonderful, sidelit outline of the form underneath. Broken up by the lace, the model's shape becomes nicely abstracted and the form beautifully delineated. See **image 17.7**.

SEMI-OPAQUE CLOTH

Cover your model with a semi-opaque cloth and direct her through a series of movements. The fact that minimal body details are evident will only add to the sensuality of the image because your mind will have to fill in a lot of details that you can't actually see. In the case of **image 17.8**, the model's arm is in a position that's not initially indicated by the folds of the cloth. It's small details like this that make for an interesting composition.

CLOTH AS MYSTERY

Black netting, draped or wrapped around a model, is about as sexy and mysterious as it gets. There's some-

IMAGE 17.9.

thing about being able to glimpse what's underneath (but not see everything) that makes a viewer look harder. Netting is semi-stiff, so it will not drape smoothly but can be pulled and tweaked into a variety of shapes. Multiple layers help, too, as density is built up where layers overlap. I store this fabric crushed into as small a shape as I can make just because I like the wrinkles that it produces when it's unraveled (**image 17.9**).

A GRAYSCALE PHOTOSHOP TRICK

Find a fabric with color that's close to the values of any of the RGB channels. In this case, I used a piece of cloth very close to pure red. Pure blue or green would work as well. See **image 17.10**.

Open the image in Photoshop and go to Image>Adjustments>Channel Mixer>Monochromatic. In this case, the default is 100% of the red channel. If you were to use a blue or green cloth, you'd merely change the selection to 100% of the blue or green channels. The results show a very delicate form under the cloth, which now looks very light, almost an infrared effect.

Tweak the Levels if you need to. The result is a beautiful monotone. See **image 17.11**.

IMAGE 17.10.

IMAGE 17.11.

PLEXIGLAS AS A BARRIER

While you can create silhouettes with the subject in front of the background, beautiful images can also be made with the model behind the background. You can use just about any translucent plastic, fabric, or paper in front of the model to create a new foreground, with the understanding that each medium has different characteristics and will produce a different look.

A 4x8-foot sheet of ⅛-inch, milk-white Plexiglas makes an excellent surface for evocative silhouettes when the subject is placed in front of it. It can also be used to create interesting images when the subject is placed behind it and lit from farther behind. I've used this technique many times and I'm always pleased with the results. White Plexiglas, because of its density, will show minimal detail, regardless of how close the model is to the background. It is most useful for general shapes, or when using shape to convey emotion and body language. To meter **image 17.12**, I retracted the dome and placed it flat on the surface, from the camera side of the foreground but aimed at the light. The camera was set to ⅔ stop over that reading. Notice how rapidly the minimal detail falls off.

PAPER AS A BARRIER

Check your local art supply store for a paper that is the thickness and translucency of tracing paper, in a width of 48 inches or more. This paper, as a foreground for silhouettes, is unlike any cloth or other barrier. When the subject is positioned close to the paper, it will allow more detail to come through but will allow the detail to fall off, radically, as the subject's distance from the paper increases. This can be a matter of only a few inches.

I set my roll of paper 4 feet from my 6x7-foot HiLite background softbox. A large, traditional softbox would

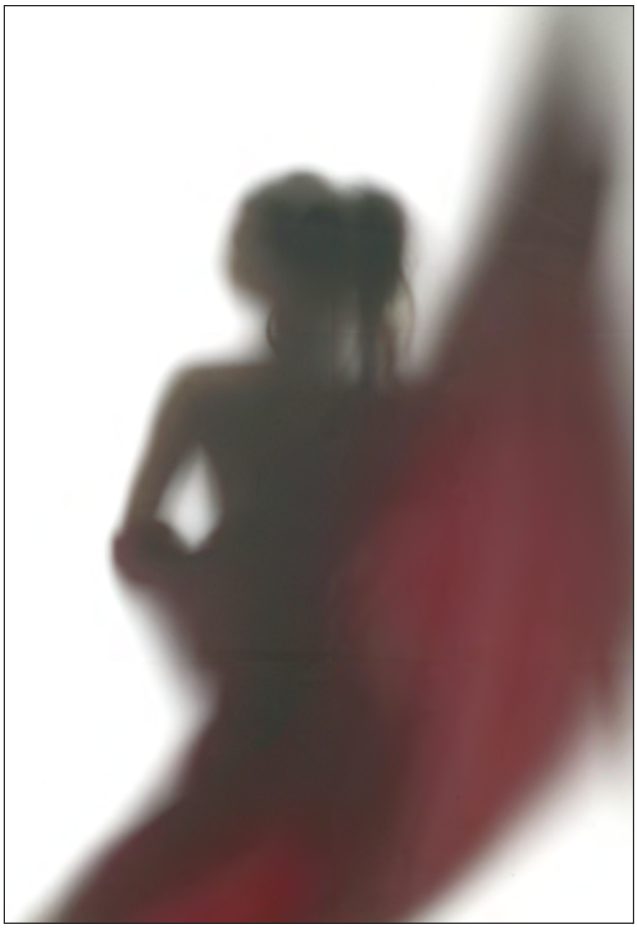


IMAGE 17.12.

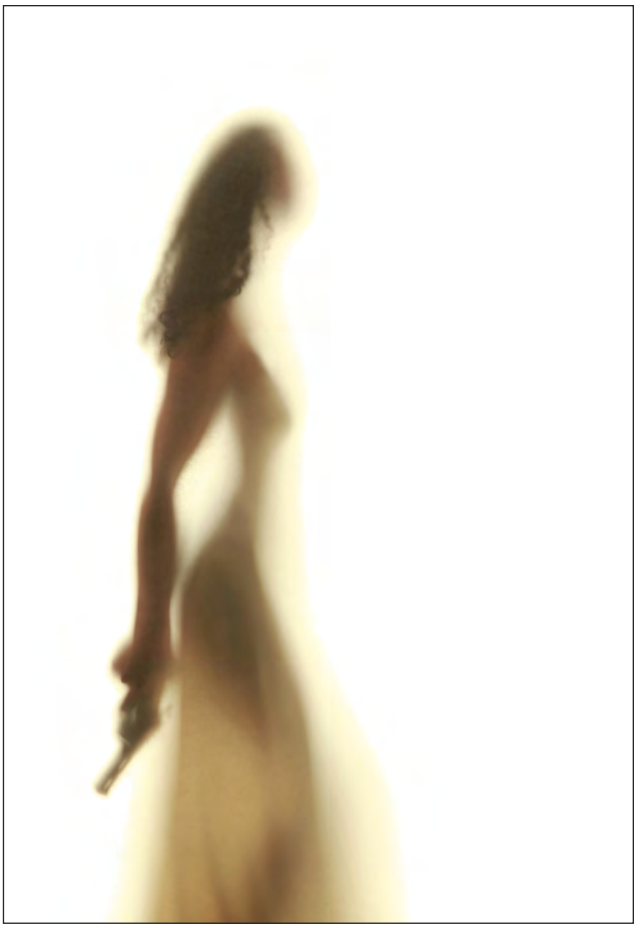


IMAGE 17.13.

work nicely as well. As source lights get smaller, though, the amount of silhouette increases and the amount of wraparound light diminishes. In my opinion, more wraparound enhances the mood in images like this, but I'll be the first to admit it depends solely on the effect one is trying to achieve. I've made a number of successful images with a smaller source.

Also, the darkness of the silhouette is determined by the amount of overexposure. **Image 17.13** was metered by placing the meter against the paper, from the camera side, and opening the aperture 1⅔ stops over that reading because I wanted the minimal amount of shadowed image that would still tell the story. Thus, a reading of f/16 at the paper would mean the camera would be set at f/9. Note the warm tone in the image, caused by the color of the paper itself. This could have been negated by shooting a properly exposed image of the paper and completing a custom white balance. I've photographed different subjects both ways but tend to favor the warmer tone.

ACRYLIC AS A BARRIER

Now, let's take the barrier concept a bit further, using just one light, one bookend, and some inexpensive common products to create a truly evocative series of images.

The most expensive part of this set is the background, a faux oriental rug that I purchased at a garage sale for $20.00. It's made of nylon polyester, worth almost nothing as a used item (about $20.00, I guess), and usually lies on the studio floor. For these images, I crossed two sturdy light stands with an aluminum fence pole. I clamped the rug to the pole as evenly as I could before raising it on the light stands. Of course, an oriental rug (genuine or not) is not the only background that one might use, but the images would be much less

IMAGE 17.14.

IMAGE 17.15.

IMAGE 17.16.

interesting if I'd used a plain paper sweep or painted muslin.

I set my one light and its medium softbox in position at camera right, aiming it across the area where my model would be standing, into a white bookend, which would reflect light back onto the model. I wanted a single-source, low key look on the model that I could build upon in later exposures. I used a long zoom lens, although only at 115mm in this case, with an aperture of f/3.2, to keep the background out of focus. The rug was rendered as an intricate pattern that might be seen as an elaborately painted or tiled wall. See **image 17.14**.

I could have stopped here, but I was looking for something more abstract, more emotional, than what this simple setup would provide.

You can buy sheets of acrylic, large enough for many window replacement applications, at any hardware store with a decent product line. They are usually cut to size from larger sheets, or you could purchase an entire sheet. Either way, the cost is not prohibitive. I had a 30x40-inch piece cut for these images. If I remember correctly, it cost about $12.00.

Prior to my model's arrival, I'd sprayed the acrylic sheet with a water-soluble dulling spray. This is something that product photographers often use to kill unwanted reflections, available through pro camera stores or through the manufacturer, Krylon. After the spray had dried, I used a paper towel to wipe a couple of random swipes through the spray and against the acrylic, enough to create a rough "window" through which I'd have a clear view of my model.

After the first set of images, I hung the acrylic sheet from the top of a sandbagged light stand, clamped onto an Avenger accessory arm and adjusted until the clear areas matched what I wanted to see of the model. I was careful to flag off as much of the acrylic as possible, but I knew some light spread would be inevitable, given the nature of the dulling spray. Still, the slight spill, along with the desaturation of some color, imparted a compelling look to the image. Be aware that you may have to focus manually because your camera may see the texture on the acrylic instead of the subject. See **image 17.15**.

After finishing the second set, I used a spray bottle to coat the untouched side of the acrylic with fine droplets of water. The resulting pattern lends even more mystery and sensuality to this very simple setup. In addition, the water droplets desaturate the few areas where I had scraped off the dulling spray, giving the entire image a more uniform look. See **image 17.16**.

18. DIMENSIONAL, SYMMETRICAL LIGHT

Lighting a subject symmetrically, which is to say by placing equally powered lights equidistant from the subject, can produce effects that are unusual, compelling, and visually interesting. Symmetrical lighting also demands that lights be placed directly across from each other, like the 3 and 9 positions on a clock, for example.

Obviously, you'll need at least two lights, though you could easily use more, and the effect will change via different modifiers.

I set two lights with medium softboxes in the 10 and 2 o'clock positions (when viewed from overhead). My feeling when setting the lights this way was that I could get great but slightly different effects no matter which way my model was facing. Both lights were powered equally to the center of the set, the point to which I directed my model, a yoga instructor.

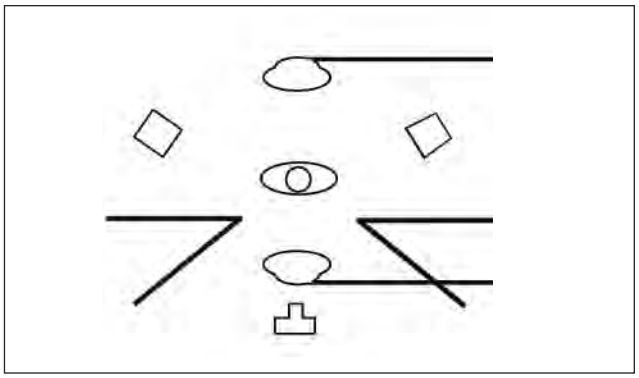
These two images clearly show how terrific light positions like these are when having to shoot flexible (no pun intended) positions like these. As long as the model is not positioned straight on to the camera you can capture some wonderful images, each with pleasing, contouring, light. The position of the lights was the same for both images. The model, who was instructed to stay on her mark to maintain her distance from the lights, changed her position from side to side. See **images 18.1** and **18.2**.

The practical beauty of symmetrical lighting comes into play when you want to vary the look; moving the model a foot or two in either direction, you can change the strength of the light that falls upon her. (This is yet another example of that pesky Inverse Square Law in operation.) Thus, you can alter the effective strength of either of the two lights to create a new, single main light that dominates the composition without changing the position of either light. This means, of course, that you can go back to the original scenario at any time you wish, just by instructing the model to move back to her original position. For **image 18.3**, the model moved about 18 inches to camera right.

IMAGE 18.1.

IMAGE 18.2.

IMAGE 18.3.



LEFT—IMAGE 18.4.
ABOVE—DIAGRAM 18A.

Image 18.4 uses four lights. A strip light was set on each of two lights in the 3 and 9 o'clock positions. They were set back about 5 feet from the model and aimed at her arms. The strobe heads were leveled at about shoulder height, to rim her hair as well as her arms and sides. Conventional thinking would dictate that the lights be placed parallel to her sides, but this would cause light to hit both sides of her face and nose, definitely unattractive when two lights are used. Setting the lights behind her made it easier for her to move around without picking up unwanted highlights.

To be certain my lens would not be affected by flare from light falling upon it, I set white bookends between the camera and the model. They were placed slightly ahead of her sides, closer to the camera, to keep their own shadows off the model but to give her a full range of movement. They were also placed symmetrically, which accounts for the "cat's eye" reflections in her eyes and the additional fill light across her front.

The placement of the two backlights worked out very well for this model because her hair was so full that it blocked light from the sides of her face. Should you try this setup, you may find you'll need to move the lights even further back to control them.

Two additional lights, 18-inch beauty bowls with 25-degree gridspots, were suspended on boom arms. The first boom was positioned about 3 feet behind the model, directly over her head, and aimed at the back of her head, to be certain the light would illuminate her hair and the top of her head. The second light was boomed directly over her from the front, in the butterfly lighting position, but set slightly lower than the hair light to prevent excessively deep shadows under her eyes and chin. All lights were powered to the same f-stop. See **diagram 18A.**

The results are stunning, with almost no unopened shadows and even light overall. Individual strands of hair are sharply defined, as are the threads of the lace garment. Even with totally even light, brighter areas still exist to help delineate her shape, thanks in part to the angle of incidence, which will always produce the effect of brighter light, even though it is not any "brighter" than any other light.

We can take advantage of the angle of incidence and produce additional effects without changing the light at all. This is one of the things I strive for with my lighting, to be able to produce more than one look with any scenario. After all, it takes a lot of time to set up and meter any good lighting scenario, and I want to get the most out of it.

Prior to setting and metering my lights, I'd placed a piece of gaffer's tape on the floor, to indicate where I wanted my model to stand. A mark such as this is important in any complicated lighting scenario, as people tend to move as they pose. Knowing exactly where she had to be made it easier for both of us to work and, after a wardrobe and makeup change, getting back into the perfect position took no effort at all. I didn't even have to re-meter (and neither will you).

After she hit her mark, I asked her to turn her head to profile. Because the angle of incidence of the camera-right sidelight was reflecting straight into the lens, the effect is that of a brighter light. See **image 18.5**.

For another version, I turned off what would be considered the main light, the light over the camera, and let the sidelights and the fill cards work their magic on the image. Without an overhead light, the image takes on some mystery as well as more contouring. This is one of the many times you can use a lack of light to your advantage. See **image 18.6**.

For the last set, I turned the main light back on but turned the camera-right sidelight off. I moved a 4x8-foot piece of painted foam into the new background (which was now the right side of the frame) and behind the model. I then moved my camera to what had been camera left. I asked her to turn her profile toward where the camera had originally been and made this image. You'll notice that there was enough light spilling onto the background (it was only 3 feet from her side), so an additional background light was not necessary. See **image 18.7**.

If you are looking for versatility in your lighting scenarios, you should play with the concept of symmetrical lighting and the variations you can achieve with it. I think you'll find it gives your work a look that many of your competitors have never considered.

IMAGE 18.5.

IMAGE 18.6.

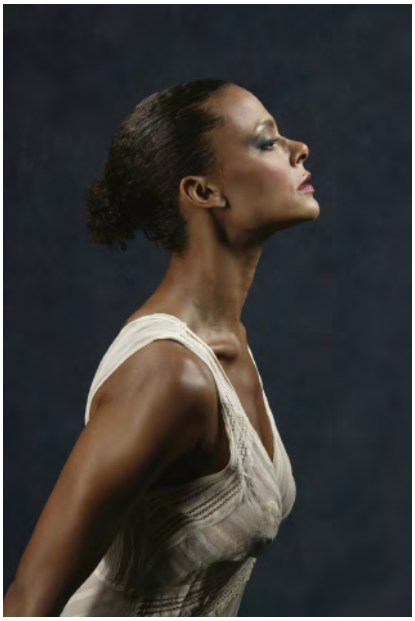
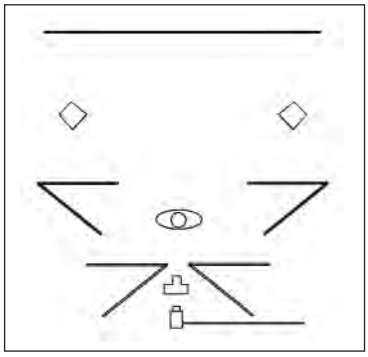


IMAGE 18.7.

19. A CREATIVE USE FOR GOBOS

I've noted many instances where a piece of material was placed between the light and the background (a "gobo" or, "go-between") or where some of the light was diminished by attaching a piece of material to an accessory arm and cutting some light to a selected area (a "flag"). Essentially, both gobos and flags accomplish the same thing by reducing the effect of a given light but, by virtue of jargon, gobos are placed on the floor while flags are attached to light stands or booms, above the floor. Either can be opaque or translucent.

ABOVE—IMAGE 19.1.
RIGHT—DIAGRAM 19A.



While controlling light is the primary reason for using a gobo or a flag, they can also be used as creative tools in your ever-deepening bag of tricks. This is especially true for gobos.

One of the coolest ways I've found to employ gobos is to use them as bookends to block light from a bare-tubed strobe. **Image 19.1** utilized two strip lights to illuminate the sides of the model from the rear. Both were goboed off with black bookends to keep light off the camera and the background. Two additional white gobos were set in front of the camera, in front of a bare-tubed strobe that was set on a boom straight above the camera, in the butterfly lighting position.

The two white gobos in front of the camera were moved into place until they formed a slit for the well-defined light from the bare tube (**diagram 19A**). Being white, they bounced a bit of the light from the rear softboxes into the shadows that they created. The end result is patterned light that creates a frame within a frame. If you're wondering how the shadow was created across my model's stomach, it's the top of my head. The light was high enough to create a great look on the model but not high enough to produce long shadows. It was unexpected and would have become a nonissue if I'd used a longer lens, but I liked it because it completed the illusion.

The next image (**19.2**) is a little more complicated in that it requires more gobos to make it happen. This is no big deal, though, when you consider the look is something you'll never get through simple lighting. The reason my portfolio is so diverse is because I rarely

take the easy way out. Your book can be just as diverse if you spend time in preproduction and think the shot through before the model gets to the studio.

In *Christopher Grey's Studio Lighting Techniques for Photography,* I wrote about cutting the light to the background by placing a gobo between the subject and the background, a terrific way to stop the background light from travelling all the way across the sweep. Here's another way to cut the light to the subject.

I began by attaching a 36x60-inch sheet of ¼-inch foamcore to an accessory arm on top of a light stand. The sheet was butted up to the background so my model could stand in front of it yet shield it from the camera with her body (**diagram 19B**). A strobe fitted with a 20 degree grid was set to camera right and aimed at the background in such a way so it did not spill over the top of the foamcore. This is critical to the illusion, as you will not want to see any light coming over the top of the foamcore that will follow the same angle as the background light itself.

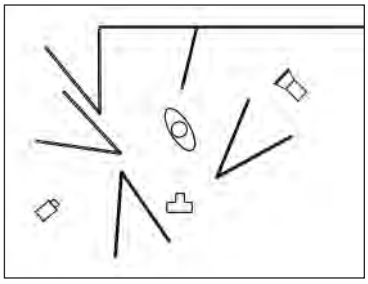
To camera left, and also butted against the background, I placed a white bookend. This served two purposes: it bounced a bit of residual light from the background light back to the shadows that were sure to form on the model and would also be the furthermost edge to the lighting effect. A second white bookend was set very close to the edge of the first, to create the slit the bare-tubed strobe would come through, as well as to bounce a little extra light.

A black bookend was positioned close to the second white bookend, forming a slit light would pass through. A bare-tubed strobe was positioned between the last two bookends, at an angle that would allow light to fall onto the model. It was also set about 5 feet behind the slit, to throw a sharper shadow onto the model.

To camera right, I set another black bookend, angled to the model. I wanted to negate, as much as possible, any white spill light that might fall on her. I knew this would make the background light more dramatic.

If you look at the image, you'll see that the background light would be expected to follow through to the other side of her body. Also, the light coming through the slit follows an almost perfect line.

ABOVE—IMAGE 19.2.
RIGHT—DIAGRAM 19B.



You can mimic the look of a gridspot by cutting a hole in a gobo and shining light through it, onto the model. Even if the effect isn't exactly the same, it is still cool and should be included in your repertoire.

I created a large gobo by taping two 4x8-foot sheets of white foamcore together along a vertical spine. A circular hole—about 6 inches in diameter—was cut into the spine. (Astute readers will know that this is the basis for the bookend bounce panel. The black painted accent is immaterial in this case.) I moved the panel to camera left and placed a basic parabolic reflector on the

strobe. I directed the light through the hole, to camera right, and onto the background. See **diagram 19C**.

The model was positioned so she would receive an even dose of the light that was coming through the hole, but she was far enough from the background so the spotlight of light from the hole wouldn't be seen. The result is quite interesting because there is enough light bouncing around the studio, so the background carries enough detail to be easily seen, but not enough to be overpowered. See **image 19.3**.

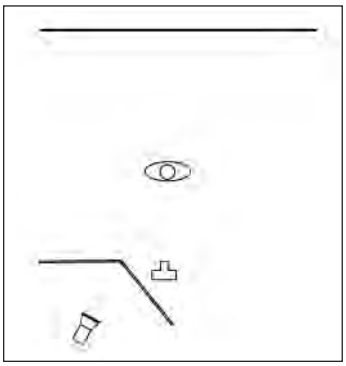
Want a brighter background? Remove the parabolic and rotate the bare-tubed strobe to the 11 o'clock position (relative to the hole in the foamcore), with the top of the tube closest to the panel. There will be plenty of light bouncing around the studio to illuminate the background, but it will only be necessary to white balance for the light on the model. If you have a color besides neutral gray or white on your ceiling or side walls, you'll see a color shift on the background (**image 19.4**). Depending on your décor, it could be cool—or not.

Using softening modifiers such as umbrellas or softboxes will not produce what I feel are terrific results. Your results may be different, or I may have missed something, so I encourage you to experiment.

Another way to creatively use gobos is to create shapes with them. While the next segment of this chapter may suggest that this application is not really a gobo, but instead a cookie, I'll leave the final determination up to you. The point is that this is a cool trick, and one you should use when you have the opportunity.

For **image 19.5** used two pieces of black foamcore, each about 12x36 inches, to create a V shape, and then clamped the gobo onto a light stand. I needed to find a position that would hide some of the model while creating an interesting look to the light. It took only a couple of minutes to find the right position for both my single light (a strobe fitted with a basic parabolic reflector) and my gobo, with the strobe shooting through the gobo. I also used a white bookend at camera left to bounce a little light back into her hair.

This is a trick that's simple, evocative, and worth every penny of the higher price you can charge for the



BELOW LEFT—IMAGE 19.3.
BELOW RIGHT—IMAGE 19.4.
LEFT—DIAGRAM 19C.

IMAGE 19.5.

image (because your competition is content with the tried and true).

THE GOBO AS COOKIE

Technically speaking, a gobo that breaks the direct stream of light and throws a pattern onto the background is called a "cookie." It's from an old Latin term you may have heard about if you've ever been involved with theater, "cucoloris" (also spelled cuculoris), and can be virtually anything that goes between the light and the background—patterns cut in window screen or pasted onto glass, tree branches, whatever.

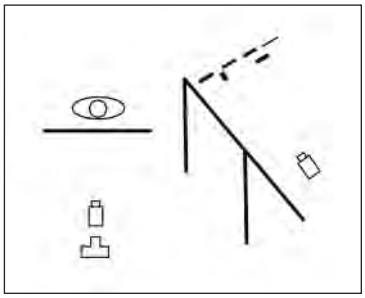
In still photography, the best way to project a cookie onto the background is with a bare-tubed strobe, because light from it casts hard shadows.

For a fashion shoot, I clamped several long strips of cardboard between two light stands in an irregular pattern, off to the camera-right side of the set. A bare-tubed strobe was positioned to throw shadows across the background in a pattern that I liked (it's easy to change the pattern by simply moving the light). The cookie and light were goboed off from the rest of the set with black bookends to keep light off the model. The model was lit with her own bare-tubed strobe. To keep its light off of her, a flag was set above and just in front of her, shadowing the background from its light but letting it fully fall on her.

It might sound complicated but it really isn't. It took about 10 minutes to set up. See **diagram 19D**.

The results were stunning. What had originally been an interesting shot of a beautifully made up woman against a yellow background became so much more dynamic that the transformation, as viewed by the model on the camera's LCD, actually inspired her to a more impressive performance. See **image 19.6**.

Want to see a cool way to use a flag? Check out some of the shots in chapter 23, "Fitness," for a couple of great examples.



BELOW—IMAGE 19.6.
RIGHT—DIAGRAM 19D.

20. SHOOTING UP, DOWN, AND ACROSS

Shooting down or shooting up are angles many of us don't use. Why not? They're dramatic or fun, depending on how they're approached. They're also difficult because you may have to angle yourself in an uncomfortable position to get what you want. Depending on her perspective to the camera, your model may have to do the same. Here are a few tips.

SHOOTING UP

The most important detail when shooting from any position is to carefully place the main light relative to your angle to the subject. In other words, if you light her so she looks great when you're standing at full height, the setup will probably make her look awful when you drop to your knees and raise the camera. Set the light so it looks good from your shooting position, with the model in at least a basic pose, for better results. I can hear many of you questioning my sanity and asking why I would point out something so basic, but I've seen too many subjects lit badly when photographed from these angles that I felt I needed to address the issue.

Shooting up is more difficult than shooting down or across. The perspective problems you may encounter when the camera is so close to the model that the lower half of the image (the area closest to the lens) looks larger than the upper half might be difficult to deal with (**image 20.1**).

Angling the model so that she leans slightly toward you and moving back a bit may be all you need to get an excellent image. In the first image, the light, a bare-tubed strobe, was placed at a typical height for her position. When she looked down at the camera, however, it was completely in the wrong position, creating deep shadows that hid her eyes and the underside of her cheeks and chin. Not very attractive. See **image 20.2**.

Angling the model toward the camera meant the main light needed to be lowered to get an attractive nose shadow. Consequently, the light stand holding the cookie (the flag with a quarter-moon pattern cut into it) had to be raised to get it to the same position.

The final image was augmented with an additional fill card at camera right. It filled in the shadows and added detail to her clothing. Net result? A beautiful image of a beautiful woman. See **image 20.3**.

SHOOTING DOWN

Shooting down, at least from a perspective standpoint, is easier than shooting up. The same attention to the angle of light must be paid, though, or you may end up with lighting scenarios that are not flattering.

IMAGE 20.1.

IMAGE 20.2.

IMAGE 20.3.

IMAGE 20.4.

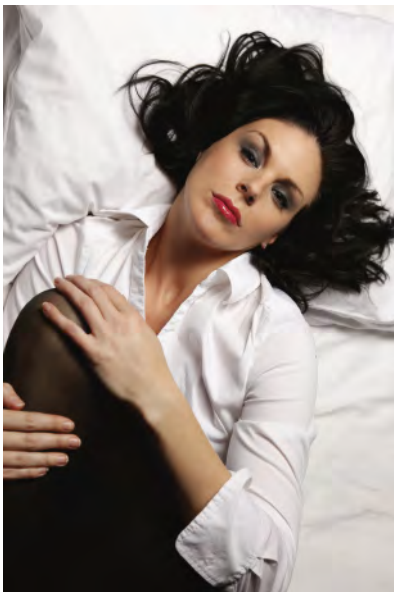


IMAGE 20.5.

To create **image 20.4**, I used a 2x3-foot softbox for the main light (the only light necessary because the model was ringed with white cloth). It was set to the camera-left side of the set and angled it so it would produce an effect that would resemble butterfly lighting if the model had been upright to the camera. Two black flags, each 12x30 inches, were separately mounted to accessory arms on light stands, cutting the light to the top of the pillow and the right side of the model's shirt and body. The gobos were set at slightly different angles and close to the light, to avoid sharp shadows and deeper underexposure. This added a bit of visual interest that a typical viewer just can't put a finger on.

I removed the gobos and moved in a three-stair stepstool to the side of the air mattress that kept my model comfortable. It's difficult to position yourself directly over a model without building some sort of scaffold, something most of us (myself included) don't have sitting around. The easiest way to simulate the effect is to get on a short ladder and lean over the subject.

Hold the camera in the landscape position (horizontally) and lean in as far as possible. You can rotate the image to the vertical position in postproduction. If the light is positioned correctly and you're in the right place, you'll be amazed how natural it looks, even though you might have been a foot or two off center. See **image 20.5**.

SHOOTING ACROSS

When you're shooting across a reclining model, you're subject to the same "rules" that apply when you're shooting up or down, with one exception. Certainly, the main light must be placed in a situation that will render attractive light. That's a given (or it should be).

In any such situation, and regardless of the depth of field you may have dialed in, be sure to focus on the eye nearest the camera. Doing so will put the primary point of interest exactly where an eventual viewer expects it. This is especially true when using a telephoto lens wide open or with a large aperture. See **image 20.6**.

IMAGE 20.6.

21. ADDING DRAMA AND FOCUS

"Wow!" is what your clients will say when they see what you can produce with this technique, a mix of tricks you can easily accomplish with Photoshop to get that oh-so-desired "Howdy Doodat?" response. I'll start with this one-light boudoir portrait that's also noted in another chapter. See **image 21.1**.

Begin by duplicating the background layer, then select Levels. In the Levels menu, below the three input levels sliders that you use to adjust brightness and density, you'll find two output levels sliders. The output levels sliders are used to remove actual black or white from the image. After selecting the duplicate layer, I'll move the right-hand slider until I've removed about half of the white value in this image, an output Level of 126. Your taste and image may dictate a different amount. See **image 21.2**. By itself, the result is less than wonderful. Fortunately, it's only a tool, a stepping-stone. See **image 21.3**.

Use the Add Layer Mask button to create a white mask, invisible on the duplicate layer (**image 21.4**).

Select a round brush from the brush palette, make sure it has zero percent hardness, and that the foreground and background colors are black and white, respectively. Increase or decrease the brush size to fit the area you wish to highlight. With the Brush Opacity at 10%, paint over the duplicate layer to reveal the original layer below. Painting with such a low opacity and a soft-edged brush pretty much guarantees you will be able to create a mask of graduated tones. Notice that my mask has areas of 100% black (allowing 100% of the layer below to be seen) and areas of lesser density (**image 21.5**).

When you're happy with what you've revealed from the layer below, duplicate the original background layer. Set its blending mode to Soft Light to increase the contrast within the masked areas. Move the duplicate layer to the top of the queue. See **image 21.6**.

You can see how the changes affect only the masked areas. Should you wish to make changes, you can reselect the mask in the uppermost layer and paint with

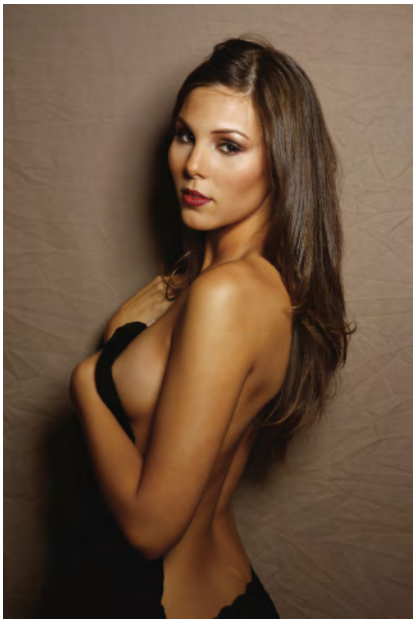


IMAGE 21.1.

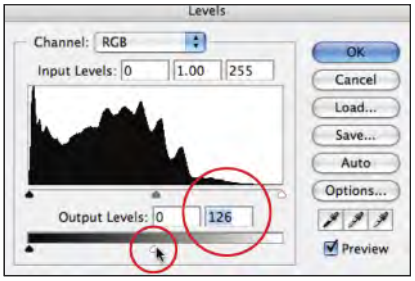


IMAGE 21.2.

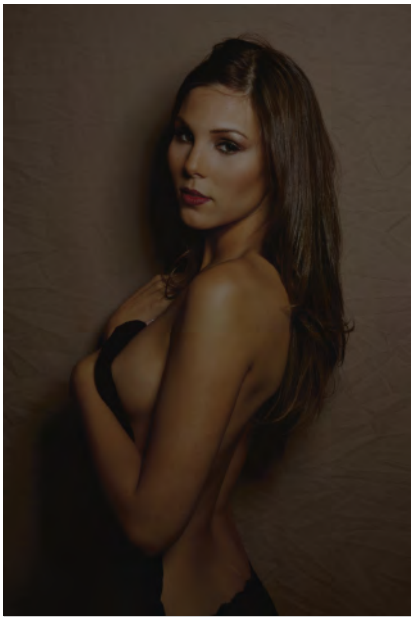


IMAGE 21.3.

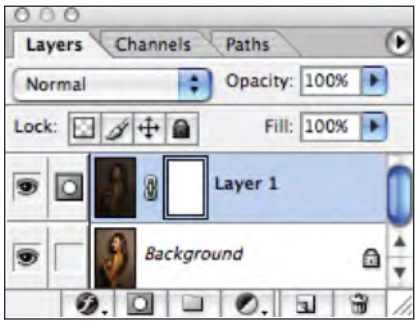


IMAGE 21.4.

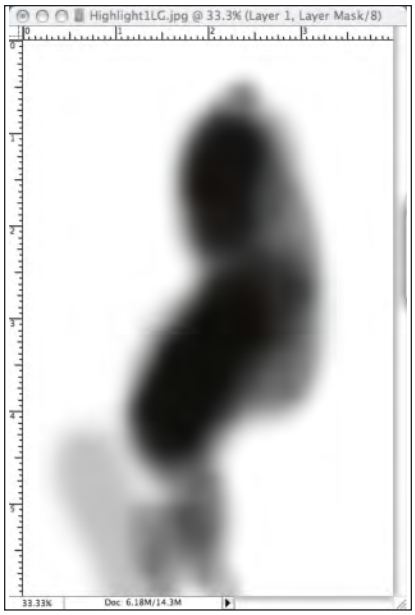


IMAGE 21.5.

IMAGE 21.6.

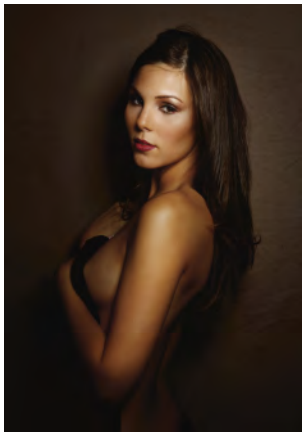


IMAGE 21.7.

IMAGE 21.8.

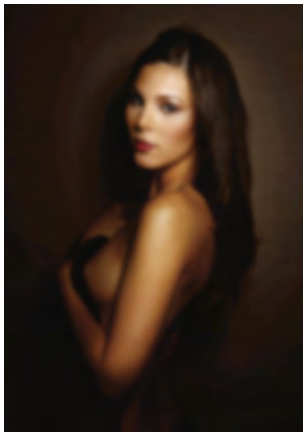


IMAGE 21.9.

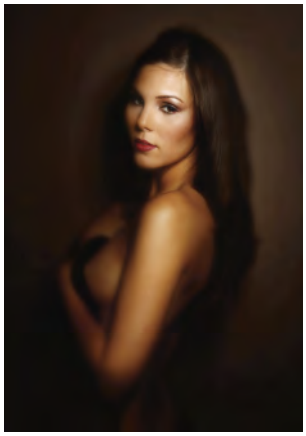


IMAGE 21.10.

black to reveal more (or paint with white to hide what you've done). See **image 21.7**.

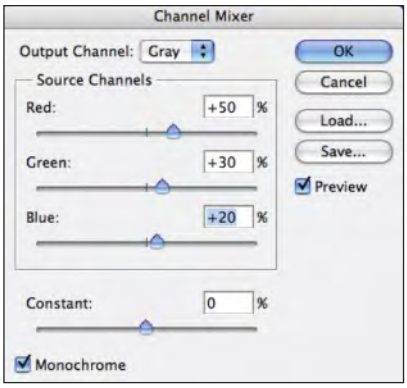
Now, duplicate the mask layer again. The new layer will automatically be set to Soft Light, but if you want a bit more contrast, set the blending mode of the new layer to Hard Light.

The end result is quite spectacular, with deep shadows (most still with detail) and bright highlights (also with detail). Images like this are reminiscent of those created after hours in the darkroom by master printers—images that were difficult to reproduce consistently and cost a small fortune each. See **image 21.8**.

You could stop here, if you wish, but there's another step that will add even more mystery to the image by re-creating and augmenting the look of selective focus with a view camera.

Duplicate the last layer. It won't matter what blending mode you used before, just reset the new layer to Normal. Then, select Filter>Blur>Gaussian Blur. I've had great success with setting a pixel radius in the 8 to 9 range, but you'll need to experiment to find what works best for your taste. When you're satisfied with the results you have achieved, apply the blur. See **image 21.9**.

Create another layer mask and paint through the areas you wish to remain in focus. Generally, you should choose only those parts of the image that are on a specific plane and paint through those to achieve perfect



RIGHT—IMAGE 21.11.
BELOW—IMAGE 21.12.

focus. Areas that are close to that plane should retain some degree of blur. Areas that are outside of the chosen plane should not be touched.

The end result is a wonderful mix of traditional techniques that were very difficult to achieve with equipment found in most traditional studios and darkrooms. See **image 21.10**.

Use the Channel Mixer in monochrome mode and you can achieve rich black & white images that will be envy of all your friends and, perhaps, make a few bucks toward those new shoes the baby needs so desperately. See **images 21.11** and **21.12**.

22. PINUP IMAGES

Pinup photography is a takeoff on "girlie" art, which entered the public consciousness around 1913 or so and became immensely popular in the late 1940s and 1950s. The principle artist of the genre in its early days was Charles Dana Gibson. His "Gibson Girls" were immensely popular and, although his pen and ink drawings revealed almost nothing of his models, they were pinned up in workshops, garages, and lockers—anywhere out of the wife's line of sight. See **image 22.1**.

"She was longer over her hair . . . gathering it and bringing it under discipline."

IMAGE 22.1.

As America shed the sexual taboos of the Victorian Age, pinup art reflected the desire for more "stimulating" artwork. Artists such as Alberto Vargas, Gil Elvgren, Earl Moran, and George Petty provided volumes of work that would be published in magazines and other venues, making them extremely popular, both as artists and as sexual groundbreakers.

Many years ago, I had a conversation with an artist who worked at Brown and Bigelow, a company that was once the premiere purveyor of calendars. For at least a decade, pinup calendars were their best sellers. The genre was so popular that the artists ground out paintings, pastels, or pen-and-ink sketches every day. He said that each of the artists in his group would often have a model, in various stages of undress, posing close to their workstations. (There were no "private" cubicles in those days, so it must have been quite interesting to walk into the art department!)

Pinup art is still very popular, and some models specialize in it. An investigation into this genre may provide you with a profit center; if you are proficient, it's one more way to draw paying clients into your studio.

Since the most recognizable pinup style is that of the 1950s, that's what we'll look at in this chapter. As you will see, you can take the fundamentals of the 1950s style and apply them to contemporary imagery as well.

Pinups are simple, fun images meant to stimulate the mental sexual response of a male viewer. I stress the fun part, as the images are (almost always) very innocent. The model may be stark naked on the set, but the camera will (almost always) see nothing, usually because of a strategically positioned prop. The key is the retro feel of the image. The original pinup artists more often than not had a caption attached to their work, usually a double entendre with a sexual overtone that was innocent enough to satisfy the overseeing censors.

I've used these techniques many times—both in tandem along with boudoir shots or on their own. Models love them, as do their husbands or partners. I find them to be a great deal of fun because of the coordination between wardrobe, hair, and makeup and, of course, my own vision and sense of humor.

Here are a few examples of how to make all of this work for you.

It's almost impossible to create a totally white background and foreground without spilling light onto the model in places where you won't want to see it. In the days of yore, when we spent multiple hours in a smelly darkroom, we'd simply dodge the print to get slightly

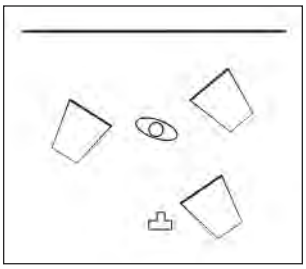
gray areas white. I say "simply," but it wasn't that easy, and usually involved multiple prints until we got one that was perfect. Photoshop is the new darkroom, and you will have to learn to use it for effects like these.

Lighting for pinup shots is usually rather flat. It doesn't have to be, but that's how the majority of pinup paintings were originally rendered. Also, most were rendered on a white background, although solid colors were sometimes used. Consequently, you'll want to broadly flood the set with light, illuminating everything. While that concept is very simple, you'll still have to engineer the light to the degree necessary to get a proper sense of dimension to the model.

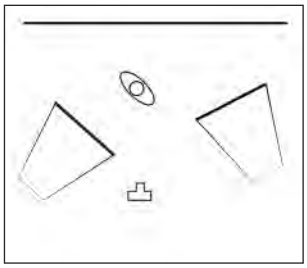
Three medium softboxes were used to light the first image. The main light was placed at camera right and provided the primary angle to the light. A second softbox was placed to camera left and aimed at the background. It was feathered to barely light the model, with most of the light aimed at the white background. The third light was placed behind the model and also aimed at the background. The second and third lights had to be placed close to the model to control the amount of spill. They were actually visible in the original files but were erased to pure white in Photoshop, as were the few areas of the white sweep that didn't photograph pure white. See **image 22.2** and **diagram 22A**.

When I contracted for model Tammi Rose to come in to the studio, I knew that I could use her alternative look to create a contemporary pinup with a retro look (or is that a retro pinup with a contemporary look?). I loved the contrast of a cute, retro-wifey, character with a contemporary, bad-ass hairstyle. Tammi is usually asked to shoot the "darker" style that reflects her look, and we did some of those that I really liked (see chapter 23, "Goth"), but I thought this idea would be such a play against type that it would be cool.

I stopped by for a reconnaissance visit with my favorite retro clothing specialists in Minneapolis, Melrose



BELOW—IMAGE 22.2.
LEFT—DIAGRAM 22A.



BELOW—IMAGE 22.3.
LEFT—DIAGRAM 22B.

Antiques (www.melroseantiques.com) and left a short time later with a period dress, gloves, and shoes, all in perfect condition.

I didn't have to light as much of the background as I did in the first shot. I needed extra depth of field in the first shot to accommodate the golf club, so a wider expanse of background was unnecessary. This shot needed only a small chunk of background and foreground near the model; the few remaining bits of non-pure white could be easily fixed or eliminated in Photoshop. See **image 22.3**.

I used two large softboxes, but two medium boxes would work almost as well. The model was placed very close to the background and was angled straight into the light from the first softbox. The second softbox was placed behind her and angled toward the background. Unlike the first shot, I allowed a tiny bit of feathered light to strike Tammi's side, just along the edge and just enough to add a –⅓ fill, which kept the shadows contoured but filled. See **diagram 22B**.

In the last year or two, I've seen a new approach to pinup photography, images that include a manufactured, partial background set behind the model. It's usually a circle, but it could be any shape that works. This may be a throwback to the earlier days of pinups (I'm not an expert on them), but the effect is intriguing. It's also a perfect trick if you use a greenscreen background or other program that will seamlessly isolate your subject against a transparent background.

There are a couple of exceptions, but this book is not meant to be a tutorial on Photoshop techniques. I've written a piece about how to easily create these background layers. You can read "Pinup Photography Backgrounds" on my blog at www.chrisgreylighting.com.

Until you get there, take a look at two approaches to this contemporary look. Remember that they are secondary to the shot itself. Pinups have their own personality, a special look, and that's what should be respected no matter what you do to the image in pre- or postproduction. See **images 22.6** and **22.7**.

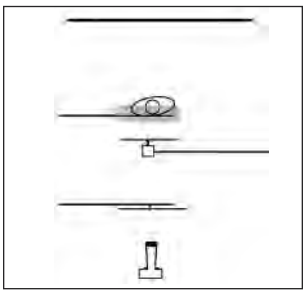
TOP—IMAGE 22.6. **BOTTOM**—IMAGE 22.7.

23. FITNESS IMAGES

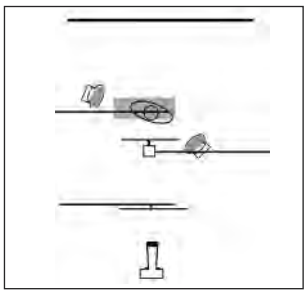
I have an ongoing project photographing images of health and fitness. A lot of it is very straightforward—I use a relatively flat light with a slightly darker or slightly brighter background, which is also flatly lit. It's a great project, even with the occasional creative restraint, because it permits me to work with a wide variety of subject matter including people, food, locations, and even conceptual imagery, all things that I enjoy shooting.

One of the assignments highlighted in this chapter was to photograph a local athlete and personal trainer to illustrate just how buff someone can get through dedication and intelligent habits (I've gotta get me some of those!). Aside from the background, which was approximately 13 feet behind the model, I decided to use hard light for her, no softboxes or umbrellas, only parabolics and gridspots to contour and accent a hard body. I also used a Canon 70–200mm zoom to further isolate my model from the background.

Many of you work in spaces that are smaller than my commercial studio. It's possible to create images just as strong as these in smaller spaces, although the influence of foreground lights may be seen on your backgrounds.



LEFT—DIAGRAM 23A.
BELOW—IMAGE 23.1.



LEFT—DIAGRAM 23B.
BELOW—IMAGE 23.2.

While your final images may look different from mine, the lighting concepts I'm about to demonstrate will work nicely in almost any space with a ceiling at least 10 feet high. The height of lights is often more important than the depth of the shooting space, and you may light the background as you wish with the understanding that some lights may splash. This piece will only be concerned with foreground lights.

My first setup was very simple but required some extra work to make it look as I saw it in my mind's eye. I set a single bare-tubed strobe on a boom arm almost directly over my model, and quite high. Bare-tube light spreads out evenly in all directions. To keep it off the background, I clamped a piece of black foamcore to the boom arm, on the background side, and positioned it so the bottom of the foamcore shadow fell at the background's horizon.

To keep the bare-tube light from flaring into the lens, I set another piece of black foamcore between the subject and the camera to throw a shadow over the lens. An additional piece of black foamcore was clamped to an Avenger accessory arm, at camera-right and near the model, and raised to create the shadow on her face. See **image 23.1** and **diagram 23A**.

For the second set, I moved the subject forward a bit, until the effect of the shadow card was diminished and her face was just at the edge of proper exposure. I added two more strobes set on short stands just off the floor. The strobe at camera left was fitted with a 10 degree gridspot aimed at her abdomen. I wanted to change the main light position, so I powered this light ⅓ stop over the original main light and changed the camera's aperture accordingly. With the camera-left strobe as the main light, the camera-right strobe was fitted with a 20 degree grid, aimed up the model's side, and powered to ⅓ over the main light (**diagram 23B**).

The resulting cross light gives fluid definition to muscles I've only seen on superheroes in comic books, and she wasn't even trying hard. See **image 23.2**.

Going for something softer but still dynamic, I put the camera-right parabolic and grid onto a regular stand and moved the strobe head about 18 inches above the model's head but in the same position, relative to her, as when it was on the floor. I also removed the overhead light so she would be lit by only two lights and powered the camera-right light down to ⅓ stop under the camera-left main light. See **diagram 23C**.

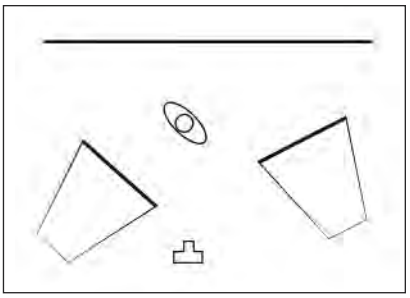


DIAGRAM 23C.

Although the first setup does require a little extra work as far as gobos are concerned, none of these three scenarios require a huge amount of equipment, and the setup should be easy to re-create in your space.

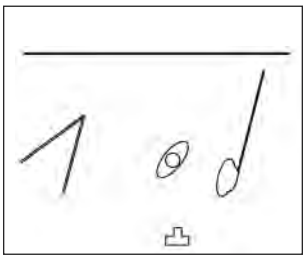
A simpler but no less effective approach is to fit a single strobe with a beauty bowl. One of the keys to using a beauty bowl effectively is to move it closer to or farther from the subject, judging the quality of the light by how it looks to your eyes and the occasional LCD check. You'll find there's a "magic" distance for every subject, one distance placement that lights your model in a better way than any other. The size of the bowl and how it reflects light will determine what that distance might be. The next image (from another shoot) utilized the light about 3 feet from my model.

Couple the beauty bowl with a white bookend reflector, placed far enough away from the subject and opposite the main light so the bounce light will give you a meter reading of about 1 stop under the main light (a totally subjective decision as you may like more or less bounce) and you'll produce images with a great deal of contour, emphasis, and just enough shadow detail to kick the subject out of the dark background. See **image 23.3** and **diagram 23D**.

One more option is to use the beauty bowl on a subject against a white background, whether it's a slightly overexposed white paper sweep, a large softbox, or an even larger softbox such as Lastolite's HiLite. The brighter background will blow out any shadows to white, while the beauty bowl light will create definition. See **image 23.4**.

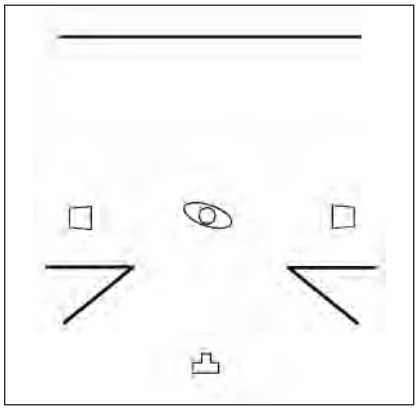
While setting up for yet another shoot, I decided to try another tack with the beauty bowl, adding an extra layer of diffusion over a bowl fitted with a 25 degree grid. My thinking was that the extra diffusion would soften and spread the light while retaining the general shape of a gridspot. In other words, if I placed my model at a correct distance from a light-gray background (as determined by my light meter), I would get enough light on the background to distinguish any shape that might be hidden by shadow, avoiding tonal merger. At the same time, the shadows created by the light would be softer than if I used only the grid, and the overall background would be darker than light gray. I found a distance of 7 feet from the background to be perfect, given the height and angle of the light.

I placed the light on a boom arm and raised it to approximately twice the height of my model, about 11 feet off the floor. The height meant the intensity of the light would fall off gradually over the vertical section of

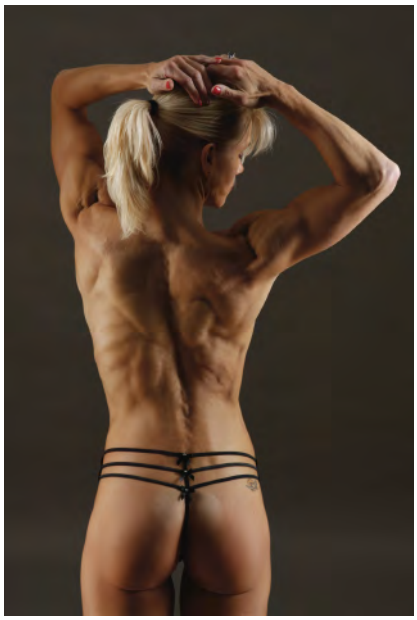


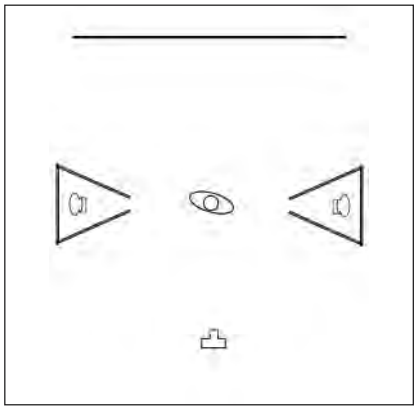
LEFT—DIAGRAM 23D.
BELOW—IMAGE 23.3.

ABOVE—IMAGE 23.4. **BELOW**—IMAGE 23.5.



TOP—IMAGE 23.6. **ABOVE**—DIAGRAM 23E.





TOP—IMAGE 23.7. **ABOVE**—DIAGRAM 23F.

IMAGE 23.8.

her body that I wanted to photograph. Placing the light closer to the model would mean a more rapid falloff from correct exposure to underexposure.

Some strobe manufacturers offer diffusion panels with elastic bands that are fitted for, and wrap around, their beauty bowls. They are convenient and designed for minimum light loss, but it's not necessary to purchase one because they can be flimsy and rip easily. A simple piece of thin cloth, such as white chiffon, will work quite nicely. Be certain to stretch it and clamp it as tightly as possible over the reflector and, of course, do a custom white balance before going for the money shot. See **image 23.5**.

Sidelighting is a mainstay of fitness photography, and there are many ways to create a look. The most common is when two parabolic reflectors are used, each placed and powered at equal distances and strengths, at each side of the subject. While I'm not opposed to this scenario, I don't typically use it myself, as I prefer a softer source, which creates softer shadows. Unless I want to emulate contrasty stage lighting, I always attempt to be bigger than life (and I'm only 5 feet 7 inches, so that takes some work).

The first shots were made using strip lights, one on each side of my model, and powered to equal strength as measured at her shoulders and with the meter aimed at the lights, just as you'd measure a profile portrait. I placed a black bookend between each light and the camera, to avoid any lens flare. Strip lights are quite directional. Even though they are softboxes, their spread

IMAGE 23.9.

is very narrow, so there is minimal light on the background. See **image 23.6** and **diagram 23E**.

There is a way to modify bookends into a soft light source. I've written about this before, but I believe it's worth repeating, especially with the new option that I'll describe in a moment.

You'll need four complete white bookends as the basis of this scenario. That may seem like more than you need, but given their inexpensive nature (and the fact that they snug up and store so nicely against the wall) I'm sure you'll find many uses for them.

In pairs, form an inverted V by using one side from each bookend to form a common back. Place a strobe with a standard parabolic reflector on a stand that's been elevated almost to the top of the bookends and angled downward at approximately 45 degrees. Open the V to get the amount of light spread you wish and power each light to read the same at the shoulder. You can open or close either side, as you wish, to get a spread of light you like, but be sure to re-meter each time you make an adjustment and change the power if necessary. Of course, you can power either light up or down to vary the effect. The final ratio is entirely up to you. Note that the background appears lighter because light bounces out of the bookends differently than it does from softboxes, and more of it finds its way to the background. See **image 23.7** and **diagram 23F**.

A very dramatic option, which I've not written about before, is to place the two strobe heads as low as possible within the bookend Vs and aim them upward at approximately 45 degrees. You may not want to do this if your subject is facing the camera, because the nose shadows will be unattractive, but this is a gorgeous scenario for other positions.

Take it a step further and set the exposure more for the shadows than the highlights. In this case, I added ⅓ stop to the exposure, opening the shadows more and brightening the highlights to the brink of overexposure. I also narrowed the opening between the bookends to keep extra spill off the background. The result is absolutely beautiful. See **image 23.8**.

Fitness photography is a wonderful market. Any woman who goes through the effort of sculpting her body, whether for competition or not, is proud of the work she's put into it and will pay good money for images that beautifully represent her in her prime. Tap into this market, take more time to create images than the on-stage amateurs that typically haunt the competitions, and word of mouth will bring customers to your door.

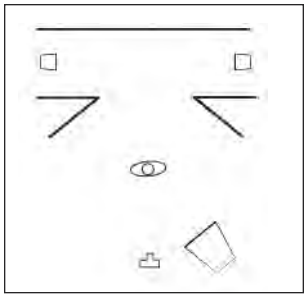
By the way, asking your model to "oil up" and then converting an image to black & white is a great way to increase sales. There's a built-in surrealism about black & white that lends itself to images such as these. See **image 23.9**.

24. GOTH IMAGES

There's a lot more to this global subculture than meets the eye, and I was surprised to find how much I enjoyed working within some of its various genres.

Most, but not all, of the goth genres proponents strive to look ethereal, with significant light to dark contrast between their skin, hair, clothing and, in most cases, makeup. Their romantic yet mystical roots can be traced as far back as Washington Irving's novel, *The Legend of Sleepy Hollow.*

For example, "traditional" goth is deep, dark and romantic. Black or dark gray are the dominant colors, especially for eye shadow, lipstick, and nail polish.



LEFT—DIAGRAM 24A.
BELOW—IMAGE 24.1.

Traditional goth references its own style of writing, showcasing the desire to be different yet stand out. Consequently, images may be staged as you wish, with lighting that accents the model's beauty and wardrobe.

My first shot was against my greenscreen. Two strip lights evenly illuminated the space behind the model and were goboed off with black bookends to keep light off the model and the lens. I didn't want any highlights on the model's sides because that would have ruined the darker edges caused by the edges of her fishnet top. She was lit with a medium softbox, placed about 5 feet in front of her at camera right. See **diagram 24A**.

The background for this image was shot in a downtown location, part of a skyway that runs between two buildings. It was shot with bright sunlight coming through the windows, but that was altered by removing half of the white in the image (see chapter 21, "Selective Focus and Highlights," for instructions).

After completely desaturating the background in Photoshop, the image of the model, which now had a transparent background, was placed on top. The result is a glamorous portrait in a dark, somewhat dungeon-like location. It's my model's favorite picture of herself. See **image 24.1**.

Corsets, cinchers, capes, masks; there are more interesting articles of clothing for goth shoots than most any other, and you can rely on the model to bring a selection of items to the shoot. The genre is important to them, and they've spent time and money building their wardrobe for their personal style.

I wanted to highlight my model's hair without calling undo attention to her push-up bra and corset, so I set a single light and basic parabolic reflector on a boom arm almost directly above her, just slightly to camera left. The reflector had been fitted with a 40 degree grid and angled to produce a mild vignette on the wall. A sheet of black foamcore was inserted between the light

IMAGE 24.2.

and the model, cutting the light at her chest and throwing everything below into deep shadow. The light that was allowed to fall on the wall kept the shape of her form intact. See **image 24.2**.

Of course, there's nothing that says you can't approach goth imagery in a more traditional manner, avoiding the dramatic and accenting the sensual. Even with the nontraditional (to my usual point of reference) hairstyle, she was still a lovely woman.

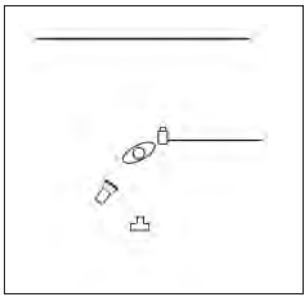
This image took just a little bit of extra work and relied on the camera's ability to custom white balance.

I flooded the studio with blue light by placing a bare-tubed strobe on a boom arm. It had been wrapped in a sheet of deep blue gel and was flagged off to keep its light from hitting the lens. A piece of a blue sectional couch was placed in front of a white background. My model, wearing a vintage blue nightgown, sat in place while I moved a light with a 10 degree grid into place and adjusted the distance to light only a small portion of her. I metered for her light, then powered the blue light back 1 stop to get even deeper color. See **image 24.3**.

I substituted a neutral gray target for the model and made an exposure. The custom white balance function of the camera neutralized any blue that might dilute the white light. While the altered white balance changed the color of the background blue slightly, the light on her face is normal and neutral. See **diagram 24B**.

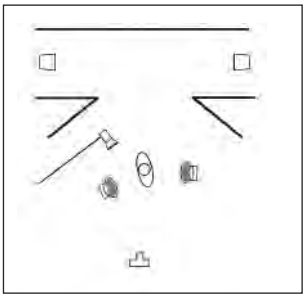
Goth writing and poetry wraps itself in dark thoughts of rejection, body image, androgyny, the search for identity in a world of sameness, etc. You may find (as I have) that a goth model is more willing to attempt a concept with psychological implications than a non-goth model, laying her psyche on the line and immersing herself in the idea.

I wanted to look at androgyny, the blending of masculine and feminine, in a way that might be tied to a woman testing her sexual identity. After discussing this with my model, I set a parabolic on a boom arm. A makeshift snoot, a tube meant to channel light, was irregularly formed from two 24-inch sheets of Cinefoil. It was taped to the reflector and funneled the light through a tight, noncircular shape that was pointed at the model from above. Made from a flexible material, it



LEFT—DIAGRAM 24B.
BELOW—IMAGE 24.3.

IMAGE 24.4.



LEFT—DIAGRAM 24C.
BELOW—IMAGE 24.5.

could be bent or crushed until the light went where I wanted it to go. The drama of the shot was more important than technical perfection, and I did not use any other light or fill. Most of her shadows blended almost totally into the background. It was exactly what I wanted. See **image 24.4**.

Vampirism seems to hold a special fascination for goths, a fact that's not been overlooked by Hollywood, so for a fan of classic horror movies like me, the urge to create a glamorous vampire could not be ignored for this chapter. With a set of prosthetic fangs and a tube of Dentu-Grip, my model, makeup artist, and I got to work.

I began by lighting my greenscreen background evenly, as I mentioned earlier. To light the model, I set two strobes with parabolics and 20 degree grids on short stands just a few inches above the floor. The reflectors were covered with a medium blue gel, aimed upward and into the spot where she would be standing. Another strobe and parabolic, this one sporting a 10 degree grid, was mounted on a boom above her position. See **diagram 24C**.

As with the previous model, this one really sunk her teeth into the shoot (no pun intended). *[Note to author:* Is that the best you can do?—Ed.] One look at her body language will tell you that.

After she had been separated from the background, I chose a winter background I'd shot after a snowfall. As before, I removed some of the white from the image. I also sampled the blue color on her gown and created a new layer in Photoshop, filled it with that color and blended it with the snow layer. I added her to the mix and tweaked each layer until I was happy. Mr. Lugosi would be proud. See **image 24.5**.

It's not all doom and gloom in the world of goth. "Perky" goth proponents mix bright colors with basic black clothing and accessories, while hair extensions add

ABOVE—IMAGE 24.6. **BELOW**—IMAGE 24.7.

visual interest. Makeup is more fun, perhaps mixing red lipstick and nails with black eye liner and shadow. Goths like to have fun, too.

For this shoot, I'd set a large softbox over and just slightly to the right of the camera. It was far enough from the model to throw an even exposure from her shoes to her face. Even though she was on a white sweep, there's no way the paper can be blown out to overall pure white, except perhaps in the foreground where it's closest to the light. About 30 seconds worth of Photoshop was all I needed to create a pure white background and foreground. See **image 24.6**.

One other aspect of goth that I find wonderful and campy is "cyber" goth. With an emphasis on plastic, especially as it applies to sci-fi, cyborg, or alien characters, colors are neon-bright, and accessories are exaggerated and cheap looking (note the vinyl purse and surgical mask).

Cyber goth is huge in Japan but has a large following here in America as well. It's more anime, a form of cartoon, than anything else, but it's a hoot to shoot.

The main light for this image was a 45-inch white umbrella, set directly over the camera. A beauty bowl hair light, at ⅓ stop over the main light, would provide separation from whatever background I chose after eliminating the greenscreen. The background shot itself, a cemetery (something to look forward to if either of these two nurses were to treat you), was darkened as before but masked and painted through to give the impression of light from the subjects falling off into the background. Great fun! See **image 24.7**.

There are many more genres within the goth world that would be fun to explore for both of us. If you're interested, you can find a great deal more information on the history of the goth movement at Wikipedia.com. Avoid references to Ostrogoths, as they've been extinct for about 600 years.

25. BOUDOIR PHOTOGRAPHY

Most of us are at least familiar with the concept of boudoir photography, in which a client, usually female, hires a photographer to produce glamorous, sexy and, most importantly, *private* images for her significant other. This trend has been around for a long time but its popularity has exploded since digital became a driving force in photography—and for a couple of reasons. First, societal mores have become increasingly relaxed. You can blame that on current fashion, MTV, the Summer of Love, or whatever you want, sex and sexuality play a greater role in our lives than any time in the past. Second, with digital, the only people who might see the images are the photographer, the client, and the recipient. The risk of a photo lab employee recognizing the teller at his bank has been largely eliminated—especially if the studio prints the photo order.

Boudoir style photography differs from conventional photography in that it can lean more toward art and can be very effective, perhaps most effective, when some conventional rules are broken.

Because these jobs are contracts between people "off the street" and the photographer, most real boudoir images are never published. There is no release needed, because the photographer is trusted to not use the images for anything other than the client's use. Let me stress that point: any photographer who abuses that trust and exposes his client to the public deserves to be sued, with the client deserving to recover monetary damages.

With that in mind, I created some samples of boudoir imagery using professional models, one of whom said, "My boyfriend will love these!"

One mainstay of boudoir photography is lingerie. These images are meant to arouse the viewer, let's be blunt, as only a mate can do. Sexy undergarments certainly contribute to the mood. Implied nudity, in which

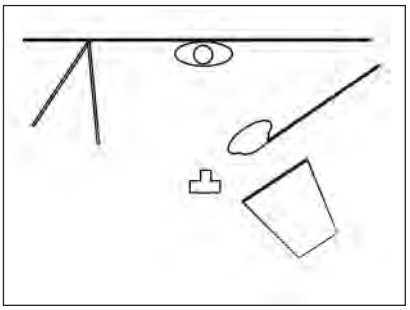


DIAGRAM 25A.

IMAGE 25.1.

IMAGE 25.2.

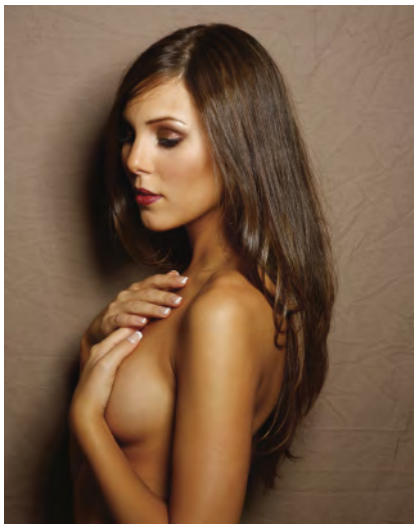


IMAGE 25.3.

the subject may be nude but nothing shows, is also very effective. Both promise an even greater degree of pleasure to be had, well, later.

My first setup was just a little complicated but worth the effort. I'd purchased an inexpensive dark-tan bedsheet and washed it to eliminate the folds. After it was dried, I stuffed it into a bag to make it wrinkle. In the studio, I simply pinned it to a wall, wrinkles and all, to get a subtle texture.

I used one of my favorite double main light setups, setting a medium softbox about 7 feet from the model. I placed another strobe fitted with a beauty bowl and a 25 degree gridspot 3 feet from and directly in front of the model, at the same angle. The two lights were measured separately, with the softbox set 2 stops below the beauty bowl. I'd also placed a white bookend 3 feet to the left of the model to bounce some light back to her shadow. When all of the lights were properly powered, I measured the light again, with both lights flashing and the bookend in place to get my final, working aperture. See **image 25.1** and **diagram 25A**.

You'll want to use each lighting scenario as much as possible, both to give your client a large selection of images and also to get her comfort level high enough so she will not feel nervous or intimidated. The best way to do this is to confidently direct the subject through a series of subtle pose changes. Remember, a typical client's camera experience has been limited to smiling for vacation photos. It's up to you to get a performance that will make her happy.

When my client was sufficiently comfortable with me and the situation, she discreetly removed her top, covered herself, and turned back toward the camera. Her slightly reserved expression was gorgeous, and I shot quite a number of frames as she was getting used to the concept. The fact that I kept shooting and directing her was, to her, a validation that she was doing something wonderful. She was. See **images 25.2** and **25.3**.

My next setup was a bit easier (**image 25.4**). Some time ago, I'd purchased a queen-sized air mattress from my local big-box department store. It was placed on the floor and fitted with clean sheets (with some extra pillows under the sheets to create a more casual, somewhat disheveled, environment). I set a large softbox at the camera-right corner of the foot of the bed, aimed to the top, and powered it to ⅔ stop over the main light, as measured at the model's knee. The main light was a 3x4-foot softbox on a boom set over the set, just ahead and slightly to the right of where I'd be, kneeling next to her. A white bookend was placed at camera left, next to the mattress, to open any shadows.

IMAGE 25.4.

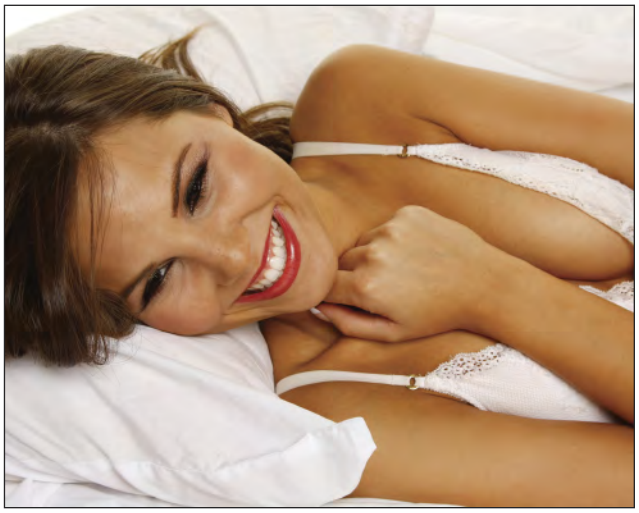
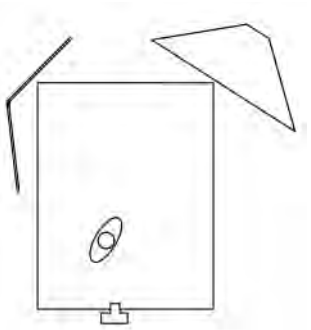
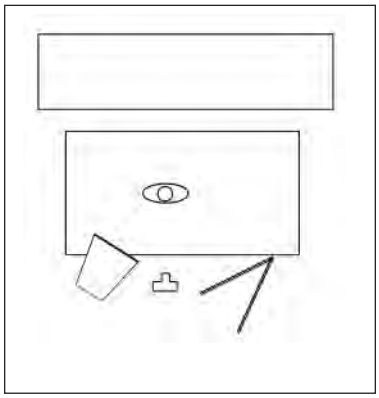


IMAGE 25.5.

DIAGRAM 25B.





ABOVE—IMAGE 25.6.
LEFT—DIAGRAM 25C.

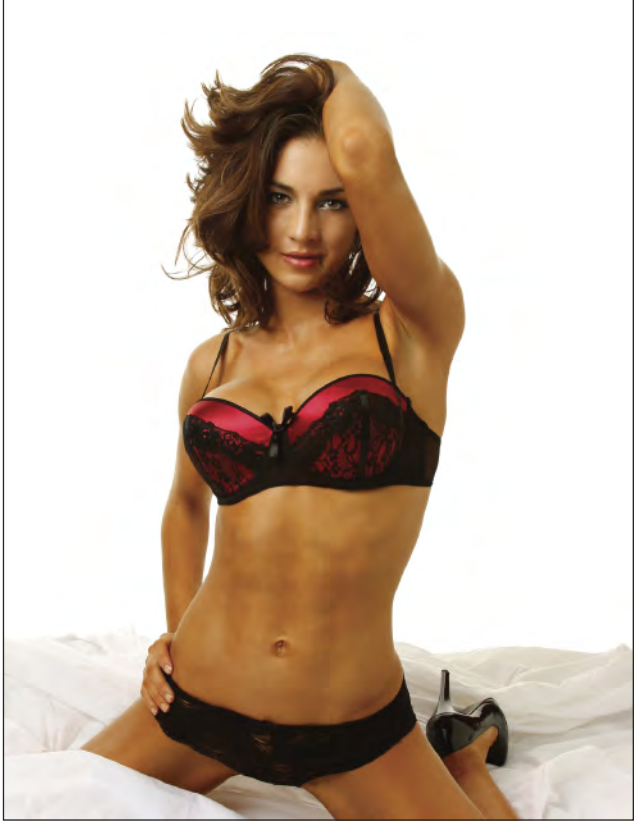


IMAGE 25.7.

Actually, the toughest part of this shoot was getting the model to substitute a mental image of her lover over that of mine—a stranger more than twice her age, on his knees next to her with a camera in her face. Because she was comfortable with the situation, she pulled it off nicely.

Keep your finger on the trigger at all times. When something unexpected happens, as it did here when the model started to giggle, shoot! Any photographer would be hard pressed to re-create the spontaneity of this image by attempting to pose it. See **image 25.5 and diagram 25B**.

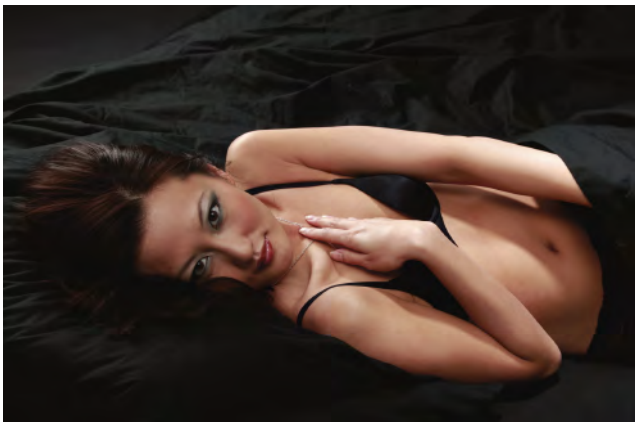
Using the same background, I had another model positioned on her back with her head close to the camera and angled parallel to the large softbox, creating a more even highlight. I'd raised the main light high enough to get a good nose shadow because of the changed angle. This was necessary because I'd be leaning over her on a 3-foot stepstool.

The net result of these simple changes was a series of images that were impressively soft and sexy, especially when she looked at the camera. **Image 25.6** is one of my favorites from the session.

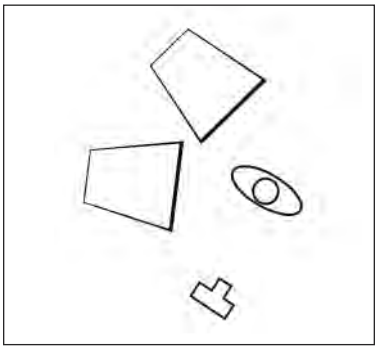
In order to get a more head-on angle to the model, I moved my HiLite softbox behind her. A large softbox would work almost as well. I say "almost" because the fabric of the HiLite diffuses light differently and arguably better than a traditional softbox. The HiLite was powered to 1 stop brighter than the main light.

I didn't want any additional highlights from the large softbox to the side; given her posture, I felt it would throw additional shadows across her face, so I turned it off but brought a white bookend in on the camera-right side to open up any shadows from the main light. See **diagram 25C**.

I posed my model in a somewhat provocative manner and began the shoot, directing her through several dozen minor changes in her position. Tousling her hair was extremely effective, and the best shots from this set came from that directive. **Image 25.7** is an example.



ABOVE—IMAGE 25.8.
LEFT—DIAGRAM 25D.



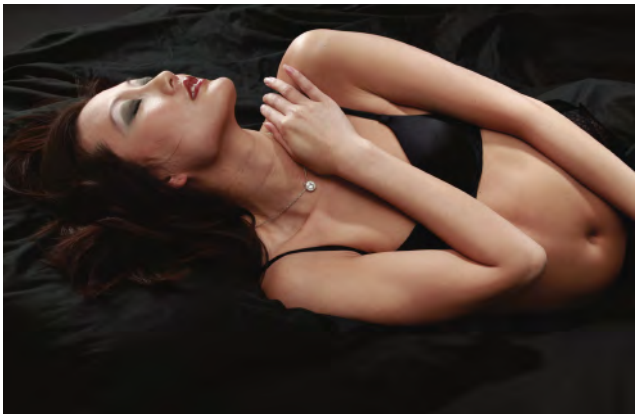


IMAGE 25.9.

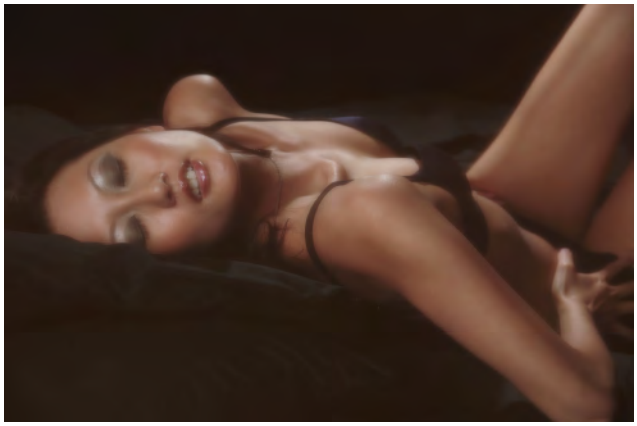


IMAGE 25.10.

IMAGE 25.11.

Black clothing and black fabric backgrounds are very effective for boudoir images. A black background will accent the shape of the client, while black cloth will separate her skin tones from the background, accenting the sexuality of the image.

This image was also made with the model on the inflatable mattress. I used two medium softboxes, one for the main light and one for the model's hair and the background. The main was to camera left, far enough from the camera to throw a perfect nose shadow when the subject lifted her head, even a little bit. The second light was set on a boom at camera right, angled to hit her side from over her shoulder. This second light was also positioned to throw a little light on the black seamless paper the mattress was on, adding an extra dimension to the set and giving the impression of something beyond the bed. See **image 25.8** and **diagram 25D**.

I like to position my lights so I can use them for more than one pose. In this case, the rear softbox threw beautiful light on the model when she turned her head up toward it, placing an evocative triangle of light on her cheek. There were no power changes; both lights were powered equally. The appearance of extra power is because the effects of light are cumulative. In other words, when her head was turned downward, it was being lit only by the closest light. When she turned her head upward, parts of her face were lit by both lights. Light plus light equals brighter light.

As an aside, note how the slight change in cropping changes the feel of this image versus the first shot in this series. See **image 25.9**.

In the chapter on maternity that follows, I explain how I often use a small piece of peach glitter organza as a soft focus filter. I used it here, carefully flagging the lens to eliminate any flare from the lights. I also changed my approach angle, bringing the camera down to the floor, lower than her head. It's an extremely intimate portrait. See **image 25.10**.

Boudoir photography is very personal and, as such, you should take direction from your client. What I mean is that you should tactfully ask your clients to tell you what interests them and their respective mates. These images, after all, are visual bedroom games. You'll need to discern the direction of certain parts of the shoot and translate that information into visuals that tell the story. See **image 25.11**.

One other tack you might try, at least for part of the shoot, is to shoot either under the modeling lights or a hot light aimed at a particular spot (not on the client). Bounced light is best. This is not a concept you should begin the shoot with, unless you understand and are comfortable with the mechanics of it.

A portion of boudoir photography often deals with how her mate makes the client feel, and those feelings are sexual. When your client is relaxed and comfortable with you, you (having previously discussed this, I hope) might suggest a certain amount of autoeroticism. Unless she gives you permission to photograph whatever you wish, I'd suggest you spend some time photographing her face and the expressions that move across it.

Don't use strobes for this set. Instead, set the ISO of the camera high enough to catch an exposure based on the hot light, just not fast enough to freeze all movement. This sample utilized a shutter speed of 1/5 second at ISO 800 with a wide-open shutter and no tripod. This meant I was moving slightly, as was she. See **image 25.12**.

You will not get great shots in the first minute, not even the first few. It will take some time before she is comfortable enough to relax for the great shots. Don't be embarrassed to observe her behavior. She's comfortable with you and trusts you enough to do this, so

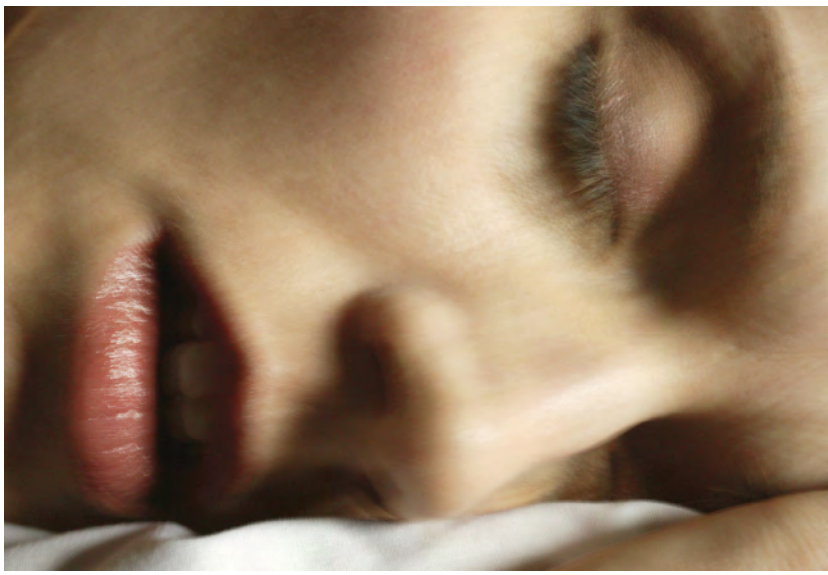


IMAGE 25.12.

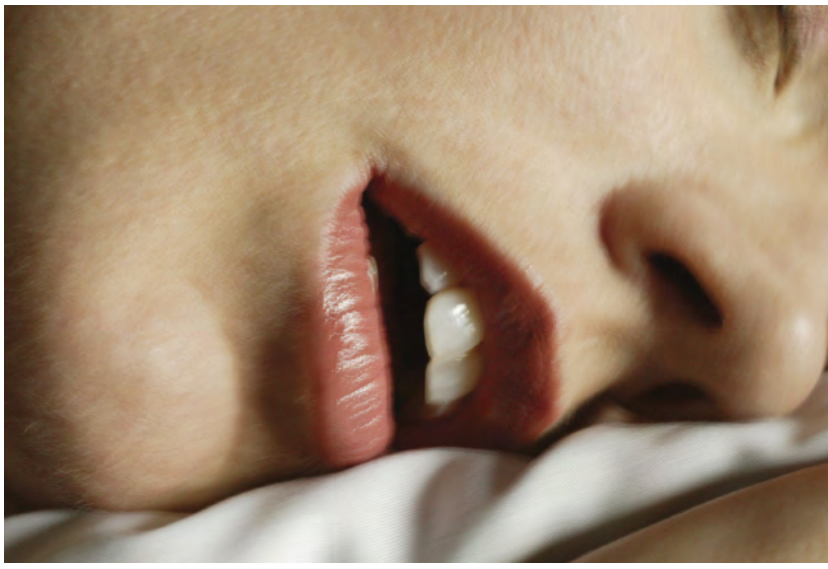


IMAGE 25.13.

don't cut it short because she's enjoying herself and it makes you feel uneasy. Let it happen. That's part of your job. On the other hand, I'll speak bluntly (like I haven't already): should she feel intense pleasure (it happens) or just act like it, well, just keep in mind she's not doing it for you. Keep your eye in the viewfinder and your hands on the camera, or your next paying job will be lining up real estate salesmen for portraits against a wall in an office cafeteria. See **image 25.13**.

Boudoir shoots can be quite lucrative for us photographers, as each client will order several different images, perhaps dozens, perhaps even a bound book or some other premium offer we might dream up. With that in mind, you'll want to schedule extra time for the session. Your client may require extra time just to get comfortable with the situation. Also, figure retouching costs into your pricing. These files need to be perfect, and that will take extra time. You may as well be paid for it.

At my studio, a shoot like this is an event to remember for the client, not just a way to use up a few hours. I insist on having a makeup artist involved in the shoot. She helps prepare the client for the camera and sometimes makes pose and wardrobe suggestions. This is an additional (but valuable!) charge to the client. In fact, I have several makeup artists I consider to be wizards and, after I explain what I'm thinking of doing, I give them full reign to do what they wish to make the client look great. I've never been disappointed. Also, having a female makeup artist on set gives the client an additional layer of security.

Speaking of which, I encourage mainstream clients to bring a girlfriend, if they wish. Men, especially the eventual recipients of the images, are never allowed, even if they know what's happening. It sets up the wrong dynamic because the client will direct her attention to the male and not to the camera. The success of these images is directly tied to the photographer/client bond, no matter how fleeting it may be.

I also ask clients to bring their favorite music on CD or MP3 player, which I'll run through the studio sound system. A nice bottle of wine, served in fine crystal and provided by the studio proprietor (that would be you), won't hurt, either.

26. THE SHORT ETERNITY OF MATERNITY

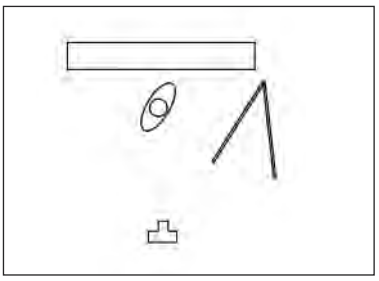
One can only assume that if your boudoir photography does its job, this job will follow.

As you can see from the topics in this section, there are many business opportunities that present themselves for those of us who can light and pose ordinary people in an extraordinary manner, and in an innocent yet sexually suggestive way that transcends any sort of traditional portraiture, that being boudoir portraiture.

There are other, more visually sedate, opportunities, and maternity portraiture is one of them. While many (if not most) women look upon maternity as an eternity in which weight and expansion are their enemies, they also see it as a short-lived time in their lives, and, no matter how many children they may conceive, each pregnancy becomes but another moment in the vast scheme of things.

I love photographing a pregnant woman. I find pregnancy to be beautiful and feel that it should be documented—not just by the father-to-be using a point-and-shoot camera, but by a professional. When I shoot a wedding, I always tell the bride that, should she become pregnant, I would love to photograph her pregnancy, whenever she'd like it done (at an additional cost, of course). This is an approach that's paid off nicely, as many brides, now moms-to-be, have called to schedule a shoot. Some have even asked me to attend and photograph the birth of the child. I've been doing this for so long that I've done high school senior portraits for kids I photographed at delivery. Now, that's client loyalty!

In many ways, maternity photography is much like boudoir photography in that you can break lighting rules to create images that are more works of art than their traditional counterparts. The primary difference, however, is that boudoir photography is outwardly directed, which is to say that whatever the subject does is directed at another, a viewer who will vicariously share the experience. Maternity imagery deals more with what the mother-to-be is experiencing and how she views the process. It's an inwardly directed moment, and something the mother-to-be will reflect upon at a later time, sometimes years later. While both styles of images may be shared with the woman's mate, mater-



ABOVE—IMAGE 26.1.
LEFT—DIAGRAM 26A.

IMAGE 26.2.

IMAGE 26.3.

nity photography is mostly for her own gratification (although the son or daughter may, and frequently does, want to eventually own the images) and addresses the mom's apprehensions and expectations, as well as the joy of bringing another life into the world.

The setup for the chapter's first image was simple: a Lastolite HiLite was set about 18 inches behind the subject. A white bookend reflector was set at a 45 degree angle to this very large softbox. The camera's aperture was set to 1 full stop brighter than what the meter read when placed, with the dome retracted, flat against the fabric. You could also use a 4x8-foot sheet of milk-white Plexiglas in front of a large softbox to achieve essentially the same effect. The bookend bounced a bit of light back into the planes of her face as she looked toward it. You can also use a large softbox as a background and create a look that's similar. See **image 26.1** and **diagram 26A**.

The emphasis in maternity portraiture is always the mom's tummy, but there are many different ways to use clothing to accent it. This second shot was made with the same lighting arrangement as the first, but with a black robe instead of a white gown. Wardrobe like this is easy to acquire and relatively inexpensive. You can create a studio wardrobe if you don't want to rely on your subjects to bring photogenic clothing (and you probably shouldn't, at least not without a pre-session wardrobe consultation). This white gown was found at a consignment shop ($2.00), and the black robe was purchased at Target ($29.99). Be sure any worn item is cleaned between uses. See **image 26.2**.

Here's another example, from a different shoot, of the same background but with an interesting twist. Instead of using a bookend on one or both sides, I set my bookend bounce panel in front of the camera. The subject is usually placed within a few feet of the panel but,

in this case, I moved the panel back to about 6 feet from the model. The exposure was determined very simply: I just set the aperture 1 stop over the reading off the background (the background read f/16, so I set the camera to f/11). The panel merely added enough fill to avoid a total silhouette. See **image 26.3**.

The next set moved to a black background. I'd decided that drama could supercede correct lighting, and I used only two lights, one as a main light and the other for her hair. Both lights were beauty bowls with 25 degree gridspots. Even though drama was a major factor when thinking through this shot, I very carefully aimed the grids to include the important information—hair, face, and tummy—and let the rest of the tones merge with the dark background. The richness of this woman's skin color added greatly to my decision. Also, asking her to close her eyes and smile slightly made the image more personal to her. See **image 26.4**.

Finally, with only one light—a beauty bowl and grid set very high just left of the top of the model's head—and a white bookend set 3 feet behind her to bounce a little light back, we created a truly evocative portrait. Placing her face in shadow created an element of mystery, especially with the light falling on her tummy. See **image 26.5**.

Maternity images need not be nude or implied nude to get the point across. Many women would like to be photographed but resist even the clichéd white gauze approach. I tend to take a fashion approach to such a shoot and will ask them to bring their most elegant clothing to the studio. This image was shot against my Lastolite HiLite, with a sheet of slightly reflective melamine wallboard on the floor. The wallboard (available at larger hardware stores) allows a partial reflection of her legs. See **image 26.6**.

In *Christopher Grey's Advanced Lighting Techniques,* I wrote about how certain kinds of cloth can produce very interesting soft focus effects. The cloth fibers act sort of like fiber optics, transmitting light and form to neighboring fibers. **Image 26.7** was made with peach glitter organza. I cut a piece to fit a step-up ring larger than the front element of my lens and anchored it in place with a UV filter. It's somewhat difficult to use, as the fabric will react to any stray light that might be

LEFT—IMAGE 26.4.
ABOVE—IMAGE 26.5.
RIGHT—IMAGE 26.6.

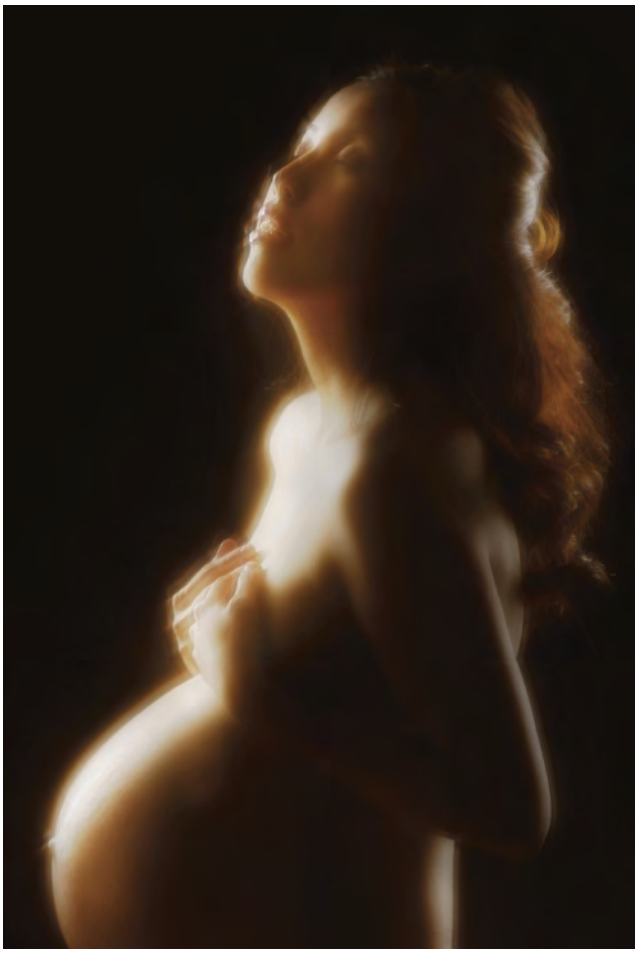


IMAGE 26.7.

IMAGE 26.8.

falling on it. It's best to use a long lens and shoot from as far away as possible, with any potential problem light goboed or flagged off so that it doesn't strike the lens. Still, the effect is worth the effort. It's almost magical.

This is not a hard and fast rule, but I think the best backgrounds are pure white and pure black. I love the contrast against the skin in each case, and I also love the uncomplicated way attention is drawn to the subject. Still, if the subject says her favorite color is sepia, you can bet that color will show up in a background somewhere. See image **image 26.8**.

Several years ago, I wrote a book called *Creative Techniques for Nude Photography in Black and White*, in which I demonstrated a few other lighting scenarios for pregnancy portraiture. I also wrote about how I felt the ideal time to make such images was in the subject's sixth or seventh month, a time at which they look, in my opinion, "elegantly pregnant." I still feel that way for the most part, but I will take my subjects as they bring themselves to me. I can and will make them look special and beautiful no matter how far along they are. After all, a waist is a terrible thing to mind.

ONE LITTLE PAGE OF SHAMELESS PROMOTION

Please keep in touch (with the understanding that the constraints of time do not allow me to answer technical questions). Drop me a note at chris@christophergrey.com and let me know how you felt about this book. Did I miss anything or did I do a good job with this topic? Is there a particular topic you think might make a good book? Send me your thoughts.

Check out my web site, www.christophergrey.com. If you've been there before, it's probably been updated by the time you read this, and you'll get a terrific overview of what I do. You can also order signed copies of my books through the site.

Check out my somewhat sporadic blog at www.chrisgreylighting.com for tricks and tips that are not in my books or on my DVDs.

Read my monthly columns at www.prophotoresource.com, a great, free site with loads of information, and not just from me. I'm thrilled to be in the company of many stellar colleagues, many of which have become friends because of this site.

Speaking of DVDs, there are several available on my website, including one made especially for this book. You can watch and follow along as I walk you through some of the techniques I wrote about in this book. You can find all the current titles at www.christophergrey.com/store.

Also, I've been working with some of my favorite makeup artists to produce instructional DVDs aimed at their contributions to our trade. Photographic makeup is different from street makeup, so if you're working with a makeup artist who either needs a "tune up" or just wants to learn from a seasoned pro, please check out those DVDs at www.christophergrey.com/store.

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AFTERWORD

I'm writing these last few words with mixed emotions.

On one hand, I'm happy to be finished with this project. I've worked on it, off and on, for the better part of two-and-a-half years, and it's required lots of thought and pre-visualization, shooting, experimenting (my favorite part), reshooting, and, of course, writing (not my favorite part). Still, I enjoy the journey from concept approval to finished text as much as I do walking into a room full of people I've never met and showing them how to do things they may have never even thought about. It's a fist-pumping "Yes!" for me. In a way, this book is just like a classroom experience, except that now you have to do the work (this might be the place for that silly, winking emoticon).

On the other hand, I'm sorry to see this project go off to the publisher. I've met and worked with wonderful people who briefly but totally immersed themselves in my project, giving me the best performances they could, trusting that I actually knew what I was doing. I don't think any were disappointed, but I'll miss the planning, the meetings with new talent, and the shoots that produced so many terrific images. I enjoyed my short collaborations with each of them but, most importantly, I love making people look better than they see themselves, and I know I can find even more ways to make that happen. Hmm, perhaps another book . . .

Either way, photography is a great direction for a creative soul to take. It's not a fork in a road; it's its very own freeway, and it goes everywhere.

I hope you enjoy your journey as much as I enjoy mine. For now, I'll just take the next exit and grab a cup of coffee.

Shoot well, and prosper.

—Christopher Grey

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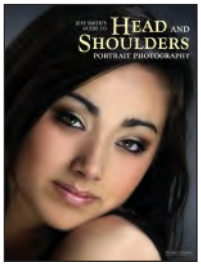

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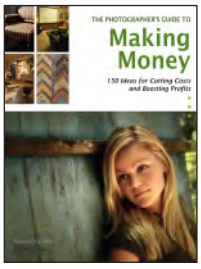

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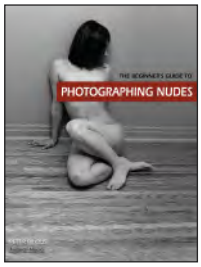

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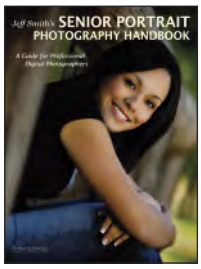

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